



City and Port of Cardiff

PUBLIC HEALTH DEPARTMENT

ANNUAL REPORT
1956

W. POWELL PHILLIPS, O.B.E., M.R.C.S., L.R.C.P., D.P.H.

Medical Officer of Health
Principal School Medical Officer
Port Medical Officer



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(As at December, 1956)

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„ A. A. HUISH

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„ J. EMRYS THOMAS

„ H. FERGUSON JONES

„ S. W. DOXSEY

„ T. A. CROFT

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Mrs. E. L. DAVIES

The Rev. F. WALL

The Rev. W. A. WINTON

Mrs. JOHN GRIFFIN

PREFACE

I have the honour to present my Annual Report on the health of the City of Cardiff for the year 1956. The estimated population for the City has almost reached a quarter of a million, namely 249,800. The increasing size of the City presents its problems to the Health Department with the constant need to maintain our services within reasonable reach of the people and to endeavour to retain a personal approach through those officers who visit the homes.

Births.—The birth-rate during the year was 17.88 per thousand of the population, whereas for England and Wales the rate was 15.7. The birth-rate in Cardiff is therefore in excess of the average by two per thousand. I am particularly pleased to state that the infant death-rate shows a marked improvement, with 27.76 infant deaths per 1,000 live births. The national rate is lower at 23.8 but this figure is approximately equal to our two lowest years, 1950 and 1953. Intensive investigations have been carried out by the Health Department to identify the causal factors which may be underlying the infant mortality. This is a difficult problem to produce to practical facts. From the evidence so far emerging it is hoped that some indications will be forthcoming which will lead to a continuing improvement with the eventual saving of infant life. Interest is now centring around the perinatal mortality figure which includes still-births and infant deaths within the first week of life. The Cardiff peri-natal mortality for 1956 was 42 per thousand live and still births compared with 36.8 for the rest of the country. The chief causes of death in infancy are congenital malformation, pneumonia, post-natal asphyxia and atelectasis, birth injury and prematurity. Pneumonia and birth injury are factors in which improvement may be effected.

Deaths.—The crude death rate in the City was 11.24 per thousand, compared with 11.7 for the rest of the country. With the increased expectation of life it is not surprising that 65.4 per cent of the total deaths were in those of 65 years and over. One-half of the total deaths were caused by diseases of the circulatory system, while cancer was responsible for one-sixth of the deaths. Cancer of the lung caused 99 deaths in Cardiff during 1956, compared with approximately the same number in 1954 and 1955. There has been no rise in the number of deaths from this cause in the past three years.

Infectious Disease.—Tuberculosis is the infectious disease which gives rise to many and varied public health problems. Our outlook with regard to this disease is now much more positive, with the intensive search for sources of infection, improved methods of treatment and the social work in relation to the family and its housing. This is reflected in a lower death rate: only 36 died from this infection in Cardiff in 1956. Contrast this with 198 deaths twenty years ago and it reflects the progress which has been made in prevention and treatment. Still there is no ground for complacency and the ill-health, financial and social distress caused by this disease remains a matter of grave concern to those working in the field of social medicine. Dr. A. H. Griffith has dealt with our specific effort in Cardiff and it is felt that those interested in this particular problem will find that the review of work carried out in 1956 is worthy of detailed study. It is set out on pages 19-25 of this Report.

We are now actively engaged in the preventive treatment of yet another of the major infectious diseases—poliomyelitis. The Government have provided a vaccine, and of the children offered vaccination, 45.76 per cent accepted. Parents were naturally rather hesitant about this method of prevention, particularly in view of some unfortunate experiences in the United States of America. Fortunately, the vaccine used in this country has been shown to be quite "safe" and there is every indication that this vaccine will more than justify the hope that it will bring one more of the dangerous infectious illnesses under control.

Whooping cough and diphtheria prevention are now a routine procedure. During the year there was one case of diphtheria in Cardiff. It is now quite a feature to have one case to report but it does serve to remind us of the need to continue to press forward with the immunisation scheme. There is little doubt that any relaxation of effort would result in further epidemics. Frankly, it is too early to make any specific statement on the results of whooping cough prevention. A further study of this is being undertaken. Meanwhile, the general practitioners and parents obviously consider that this is a useful form of prevention. From the studies which we are conducting in this Department it is felt that there is good evidence that whooping cough immunisation prevents severe infection in the age group which this infection affects most severely, that is, 0-5 years.

In the early Autumn head teachers from three districts drew attention to the fact that there were several cases of infective hepatitis in their schools. The general practitioners' notice was directed to this through the weekly bulletin. In all there were at least fifty cases known to have occurred but this is undoubtedly merely a token estimate of the extent of infection.

Maternity and Child Welfare.—The year has been notable, especially because the Maternal and Child Welfare Association Conference has visited Cardiff. The Lord Mayor of Cardiff, Alderman D. T. Williams, O.B.E., D.L., J.P., extended a civic welcome to delegates from all parts of the United Kingdom and overseas. It was most appropriate that the Lord Mayor was acting in a dual capacity, as chief citizen and as Chairman of the Health Committee. I believe that everyone considered the Conference a great success and Sir Allen Daley, the President of the Association, certainly managed the medical and social problems under discussion with his great skill so that due weight was given to the factors likely to produce future benefit in maternal and child welfare problems.

During this year our services have extended in this field, more particularly by providing clinic facilities in the outlying areas of the city. Additional or alternative arrangements are needed at the Docks, Fairwater, Llanrumney, South Ely and North Llanishen, and the Health Committee is proceeding with these matters.

One of the problems facing all those concerned with maternal health is that co-ordination may be achieved between local health authority services provided at our clinics, the general practitioners and the hospital services. Each has a part to play in the care of the expectant mother. A local committee comprising representatives of the three interested bodies has met on several occasions to discuss the ways and means whereby duplication and overlapping may be avoided. It cannot be said that a perfect system has yet been evolved, but there is general agreement that improvement is necessary and this will be attained.

There were three maternal deaths in Cardiff during 1956. Details respecting these are given on page 4.

Food Hygiene.—Under this sub-heading I am happy to note that Alderman D. T. Williams, O.B.E., D.L., J.P., was appointed a member of the Food Hygiene Advisory Council set up by the Minister of Agriculture, Fisheries and Food.

School Health.—The work of the school health service has proceeded along normal lines during the year. Dr. C. W. Anderson has devoted a great deal of study to correlating the results of school medical inspections by the various school medical officers. The individual differences revealed in the children with various defects are highly significant and his investigations are worthy of close study. It is well to review the working of the various sections of a large department at regular intervals and as the result of his criticisms of the service steps are being taken towards a more unified method of referral. There are bound to be differences in all clinical findings with different medical

officers, but it must be ensured that defects requiring treatment are not overlooked and also that undue weight is not placed on very minor variations from the normal. Dr. Anderson's observations are on pages 119-122.

New arrangements have been made with the Youth Employment Officer by which the school health service provides detailed reports of handicapped children at least twelve months before they are due to leave school. Special consideration may then be given either in the matter of training or selection for suitable work, well in advance of leaving school.

Other matters of note

A chiropody service for old people has been started in the City. It is financed by the "Hill Snook Bequest" by which the late Alderman R. G. Hill Snook bequeathed a capital sum of money to be used for the welfare of old people in Cardiff. Arrangements were entered into with the National Corporation for the Care of Old People for a chiropody service to be administered through the Health Department. I am pleased to say that this is now working smoothly and although it entails considerable detailed administrative work it is of great benefit and is being fully used.

A voluntary co-ordinating committee has been set up for the welfare of old people. With a deficiency of beds for the chronic aged sick, one of the first matters to receive attention is to raise sufficient funds to establish a home for the nursing care of old people. Voluntary effort is proceeding enthusiastically towards this goal.

In the field of mental health, "Preswylfa" which was previously a hostel for the administration of B.C.G. contacts, has now been opened as an additional occupation centre for mentally handicapped children. It has provided a much needed extension to the local health services. The parents of the children attending our two centres are most co-operative with the teachers and staff.

A weekly bulletin has been sent from the Health Department to each general practitioner in the City. It serves to disseminate information on general health matters within the area.

The general sanitary matters are reported upon by the Chief Public Health Inspector, Mr. W. G. Pyatt, M.B.E. He is likely to retire within the next twelve months and it is impossible to emphasise sufficiently what a great tower of strength he has been to the sanitary administration of Cardiff over the past 25 years. The great task now presented is towards a positive attitude in respect of house repairs. The Health Inspectorate has a formidable task to prevent property getting into a bad state of repair and to effect a steady improvement in the hygienic standards in the home. During the year there was a very instructive Sessional Meeting of the Royal Society of Health held in Cardiff.

Once more I wish to express my sincere thanks to the Chairman and Members of the Health Committee.

To the members of the medical, dental and nursing staffs a great debt is owed for their unfailing co-operation in all the aspects of their work. The Public Health Inspectorate is hard pressed today with work arising from new legislation and they have responded to their additional responsibilities.

The administrative and clerical staffs have the task of co-ordinating the work of the many special branches within the Health Department and they merit much praise.

Public Health Department,
City Hall, Cardiff.

W. POWELL PHILLIPS

PUBLIC HEALTH DEPARTMENT STAFF (as at 31st December, 1956)

MEDICAL OFFICER OF HEALTH (CITY AND PORT) AND PRINCIPAL SCHOOL MEDICAL OFFICER

W. POWELL PHILLIPS, O.B.E., M.R.C.S., L.R.C.P., D.P.H.

DEPUTY MEDICAL OFFICER OF HEALTH AND DEPUTY PRINCIPAL SCHOOL MEDICAL OFFICER

CECIL W. ANDERSON, M.B., CH.B., D.P.H., T.D.D.

SENIOR MEDICAL OFFICERS

HELENA J. WEBSTER, B.S.C., M.B., B.CH., D.P.H.

A. H. GRIFFITH, M.B., B.S., D.P.H.

ASSISTANT MEDICAL OFFICERS AND SCHOOL MEDICAL OFFICERS (Whole-time)

NANCY K. GIBBS, M.R.C.S., L.R.C.P., D.P.H.

G. EDWARD PHILLIPS, M.R.C.S., L.R.C.P., D.P.H.

JEAN W. SMELLIE, M.B., CH.B., D.P.H.

N. FRANK, M.B., D.P.H., D.T.M.

R. M. CARMICHAEL, M.B., CH.B.

ANNE GUY, B.S.C., M.B., B.S., D.C.H., D.P.H.

Eight Part-time Assistant Medical Officers

VISITING SPECIALIST MEDICAL OFFICERS

RUPERT PARRY, M.D., B.S., F.R.C.S., Ophthalmic Surgeon

A. O. PARKER, M.D., F.R.C.S., Orthopaedic Surgeon

HECTOR A. THOMAS, F.R.C.S., Aural Surgeon

Professor A. G. WATKINS, M.D., F.R.C.P., Professor of Child Health

S. H. GRAHAM, M.D., Chest Physician

DENTAL

Principal School Dental Officer—**W. A. SUTHERLAND, L.D.S.**

Dental Officers

D. W. ELLIOT, L.D.S.

J. W. LEWIS, L.D.S.

C. N. HOWITT, L.D.S.

J. McFARLANE, L.D.S., L.R.C.P. & S., F.D.S. (HON.)

H. V. NEWCOMBE, L.D.S.

D. J. ANDREWS, L.D.S.

Four Part-time.

Eight Dental Clerk-Attendants.

NURSING AND MIDWIFERY

Superintendent Health Visitor—Miss N. M. OSMOND

One Deputy Superintendent.

Fifty-one Health Visitors.

Non-Medical Supervisor of Midwives

Miss M. E. MORRIS—Sixteen Municipal Midwives

SANITARY ADMINISTRATION

Chief Public Health Inspector (Urban)—W. G. PYATT, M.B.E.

One Deputy Chief Public Health Inspector; Eighteen Public Health Inspectors; One Lady Visitor for Housing Estates; One Rodent Officer

Chief Public Health Inspector (Port)—T. G. NEWBY

Two Assistant Port Health Inspectors; One Deratisation Officer

VETERINARY, MEAT INSPECTION AND ABATTOIR

Veterinary Officer and Chief Meat Inspector

J. H. M. HUGHES, M.R.C.V.S., D.V.S.M.

Four Meat Inspectors; One Additional Inspector, Diseases of Animals Acts; One Abattoir Manager.

PUBLIC ANALYST'S LABORATORY

Public Analyst—S. DIXON, M.Sc., F.R.I.C.

One Senior Assistant Chemist; Three Assistant Chemists; One Laboratory Technician

ADMINISTRATION, ETC

Chief Administrative Assistant—A. E. BRAIN

Administrative Officers—Mental Health and Finance—W. C. SWEETLAND

Maternity, Child Welfare and School Health—P. H. WILLIAMS

Administrative and Clerical Assistants—General, Finance, Maternity and Child Welfare, etc.—27

Sanitary Administration—4

School Health Service—16

Others—3

Epidemic Officer, Ambulance Officer, Domestic Help Organiser, Public Relations Officer, Duly Authorised Officers—2; Supervisor, Occupation and Training Centre, Orthoptists (Single-handed)—2; Speech Therapists—3.

GENERAL HEALTH SERVICE

1—SUMMARY OF GENERAL AND VITAL STATISTICS

Area (acres) :—

Including inland water and foreshore	..	..	..	..	18,066
Including inland water (excluding foreshore)	..	..	..	..	15,271
Excluding inland water	..	..	..	..	14,867

Population :—

Census, 1951	..	..	..	..	..	243,632
Registrar-General's estimate, mid-1956	..	..	..	..	..	249,800
Number of persons per acre	..	..	..	..	..	16.90
Estimated number of inhabited houses	..	..	..	..	..	65,454
Estimated number of inhabited houses per acre	..	..	..	..	..	4.40
Estimated average number of persons per occupied house	..	..	..	..	..	3.82
Rateable Value, 1/4/56	..	..	..	..	..	£4,052,041
Estimated product of a penny rate	..	..	..	..	..	£15,600
Live Births	..	4,467.	Birth-rate per 1,000	{ Crude	..	17.88
				{ Adjusted by A.C.F.	..	16.81
Deaths	..	2,809.	Death-rate per 1,000	{ Crude	..	11.24
				{ Adjusted by A.C.F.	..	12.59
Excess of births over deaths—Males, 855 ; Females, 803.	Total	..	..	..	..	1,658
Deaths under one year	..	124.	Death rate per 1,000 live births	..	..	27.76
Deaths under one month	..	85.	Death rate per 1,000 live births	..	..	19.03

*Death-rate per
1,000 Total Births*

Deaths arising from Pregnancy, Childbirth, or Abortion 3 0.66

Deaths from various causes :—

				<i>Number</i>	<i>Death-rate per 1,000 population</i>
Meningococcal infections	..	..	..	3	0.012
Typhoid fever	..	..	..	—	—
Measles	..	..	..	—	—
Scarlet fever	..	..	..	—	—
Whooping cough	..	..	..	—	—
Diphtheria	..	..	..	—	—
Tuberculosis of respiratory system	..	..	..	36	0.144
Other forms of tuberculosis	..	..	..	1	0.004
Cancer	..	..	..	510	2.04
Influenza	..	..	..	10	0.041
Acute poliomyelitis	..	..	..	—	—
Enteritis and diarrhoea (under 2 years)	..	..	..	1	0.004
				<i>per 1,000 live births</i>	0.22

II—AREA AND POPULATION

The area of Cardiff (land and inland water but excluding foreshore) is 15,271 acres.

According to the Census of 1951, the population of Cardiff was 243,632 (males 115,468, females 128,164).

The population at mid-1956, as estimated by the Registrar-General, was 249,800 and it is on this figure that the vital statistics for 1956 are computed.

III—BIRTHS

The numbers of Births and Still-births registered and allocated to Cardiff during 1956 sub-divided according to sex and legitimacy, are shown in Table I.

Live-births and crude rates per 1,000 population are compared with the England and Wales figures for past years in Table II.

Still-birth statistics and illegitimate birth figures are shown in Tables III and IV respectively.

Table I

Live Births

	Legitimate	Illegitimate	Total
Males	2,209	118	2,327
Females	2,042	98	2,140
TOTAL ..	4,251	216	4,467

Still Births

	Legitimate	Illegitimate	Total
Males	52	3	55
Females	61	2	63
TOTAL ..	113	5	118

Table II

Live Births

Year	Population	Legitimate Births	Illegitimate Births	Total	Birth Rate	England & Wales Birth Rate
1947 ..	230,630	5,039	260	5,299	22.9	20.5
1948 ..	240,600	4,666	209	4,875	20.3	17.8
1949 ..	243,500	4,544	216	4,760	19.56	16.7
1950 ..	244,600	4,204	204	4,408	18.02	15.8
1951 ..	243,627	4,142	185	4,327	17.77	15.4
1952 ..	244,800	4,140	211	4,351	17.77	15.3
1953 ..	246,600	4,216	205	4,421	17.93	15.4
1954 ..	248,000	4,280	212	4,492	18.11	15.2
1955 ..	248,400	3,985	202	4,187	16.85	15.0
1956 ..	249,800	4,251	216	4,467	17.88	15.7

Table III

Still Births

Year	Legitimate	Illegitimate	Total	Rate per 1,000 total births Cardiff England & Wales		Rate per 1,000 population Cardiff England & Wales	
1947	129	7	136	25	24	0.56	0.51
1948	129	4	133	26	23	0.55	0.42
1949	130	9	139	28	23	0.57	0.39
1950	104	9	113	25	23	0.46	0.37
1951	120	7	127	29	23	0.52	0.36
1952	103	9	112	28	23	0.46	0.35
1953	99	—	99	22	22	0.40	0.35
1954	110	7	117	25	23	0.47	0.36
1955	122	8	130	30	23	0.50	0.35
1956	113	5	118	25.7	23	0.47	

Table IV

Illegitimate Births

Year	Live	Still	Total	Rate per 1,000 total births		Rate per 1,000 population	
				Cardiff	England & Wales	Cardiff	England & Wales
1947	260	7	267	49	53	1.11	1.12
1948	209	4	213	43	54	0.89	0.99
1949	216	9	225	46	51	0.92	0.87
1950	204	9	213	47	51	0.87	0.82
1951	185	7	192	43	49	0.79	0.75
1952	211	9	220	49	49	0.90	0.76
1953	205	—	205	45	48	0.83	0.74
1954	212	7	219	48	47	0.88	0.71
1955	202	8	209	48		0.84	
1956	216	5	221	48		0.86	

IV—DEATHS

Deaths from all Causes.—The total number of deaths from all causes and at all ages registered during the year and allocated to Cardiff was 2,809 (1,472 males and 1,337 females). The total number of deaths registered in Cardiff was 3,024 but 471 of these were deaths of non-residents, which occurred mainly in hospitals and nursing homes, and 256 deaths of residents of Cardiff occurred and were registered in other areas. Allowance has been made for these outward and inward transferable deaths in arriving at the net number.

The following is a comparison of the death-rate for 1956, and the preceding nine years with the death-rates for England and Wales for the same period.

Year	Deaths	Crude Death Rate	England & Wales Death Rate
1947 ..	3,036	13.1	12.3
1948 ..	2,667	11.1	11.0
1949 ..	2,784	11.44	11.8
1950 ..	2,837	11.59	11.6
1951 ..	3,182	13.07	12.5
1952 ..	2,724	11.13	11.3
1953 ..	2,774	11.25	11.4
1954 ..	2,872	11.58	11.3
1955 ..	2,830	11.39	11.7
1956 ..	2,809	11.24	11.7

Cancer.—The number of deaths from malignant neoplasms was 510 (277 males and 233 females). The deaths are classified according to age and localisation of the disease in the Table on page 5. The total cancer deaths excluding leukaemia and aleukaemia for the previous ten years are shown below.

Year	No. of Deaths			Death Rates		
	Males	Females	Total	Males	Females	Total
1947 ..	206	234	440	1.85	1.95	1.90
1948 ..	244	219	463	2.19	1.69	1.92
1949 ..	265	205	470	2.23	1.59	1.93
1950 ..	243	229	472	2.11	1.76	1.93
1951 ..	256	243	499	2.20	1.90	2.05
1952 ..	253	229	482	2.17	1.78	1.97
1953 ..	278	305	483	2.37	1.58	1.97
1954 ..	261	244	505	2.20	1.89	2.04
1955 ..	270	228	498	2.27	1.76	2.00
1956 ..	277	233	510	2.31	1.79	2.04

Deaths from Motor Vehicle Accidents.—The number of deaths due to road traffic accidents during the year 1956 was 24 (20 males and 4 females), as compared with 25 during 1955, and with 26—the average annual number for the preceding ten years.

Accidents in the Home.—This year, once again, there were more deaths from accidents in the home than from motor vehicle accidents. Twenty-seven home accidents as against 24 road deaths. Of these 27, 23 were over 60 years of age (20 over 65 and 13 over 80) and the remaining 4 were under 1. The children under 1 year of age died from suffocation, a point which should be emphasised in all Health Education talks by Health Department staff. The remainder of the accidents were mainly deaths from recumbency, following

fractures sustained in falls (18 such deaths). Burns accounted for 3 deaths, Asphyxia (vomit) 1 death and gas poisoning the remaining death.

Accidents other than Home.—Six deaths occurred from drowning, 13 from falls and nine from various accidents at the place of work, making 28 altogether. Of these, one was an infant of a year-and-a-half (drowning) and 20 (all males) were between the ages of 15 and 65. This indicates the continuing need for accident prevention work.

Maternal Mortality.—There were 3 deaths during the year arising from pregnancy. The cases were due to :—

1. (a) Pulmonary Embolism due to infusion of amniotic fluid into the uterine veins due to premature detachment of the placenta. P.M.
2. (a) Pulmonary embolism.
(b) Thrombosis of inferior vena-cava.
(c) Parturition.
3. (a) Haemorrhage due to ectopic pregnancy. P.M.

Infant Mortality.—The number of deaths under 1 year was 124. Of these 115 were legitimate and 9 illegitimate. Seventy deaths occurred of infants under 1 week and when the 118 still-births are added, we have a peri-natal mortality rate of 41.00. The neo-natal deaths number 85, 68.5% of the total infant deaths. The infant deaths causing greatest concern are, birth injuries 16 deaths, pneumonia 22 deaths (15 over 1 month), prematurity 13 deaths, asphyxia and atelectasis 22 deaths and congenital malformation 32 deaths.

The table below compares the infant mortality rate with the preceding 9 years and with the rates for England and Wales.

Year	Infant Deaths			Neonatal Deaths			Still Births		
	No.	Rate per 1,000 Live Births C'diff. E. & W.		No.	Rate per 1,000 Live Births C'diff. E. & W.		No.	Rate per 1,000 Total Births C'diff. E. & W.	
1947 ..	288	54.0	41.3	142	26.8	22.7	136	25	24.0
1948 ..	176	36.0	33.9	88	18.1	19.7	133	26	23.2
1949 ..	149	31.0	32.4	81	17.0	19.3	139	28	22.7
1950 ..	121	27.0	29.6	74	16.8	18.5	113	25	22.6
1951 ..	140	32.0	29.7	82	18.9	18.8	127	29	23.0
1952 ..	124	28.0	27.6	79	18.1	18.3	112	28	22.7
1953 ..	119	27.0	26.8	70	15.8	17.7	99	22	22.4
1954 ..	153	34.0	25.4	98	21.9	17.7	117	25	23.5
1955 ..	139	33.21	24.9	81	19.1	17.3	130	30	23.1
1956 ..	124	27.76	23.8	85	19.03		118	25.7	

The causes of death of infants under one year of age in age periods during 1956 (compiled from figures supplied by the Registrar-General) are shown in the following table :

Cause of Death	Under 1 wk.	1—2 wks.	2—3 wks.	3—4 wks.	Total under 4 wks.	4 wks.—3 mths.	3—6 mths.	6—9 mths.	9—12 mths.	Total
Meningococcal Infection ..	—	—	—	—	—	—	1	—	—	1
Other Infective & parasitic diseases	—	—	—	—	—	1	—	—	—	1
Pneumonia	6	—	—	1	7	5	6	3	1	22
Bronchitis	—	—	—	—	—	1	1	—	—	2
Other Respiratory diseases	—	—	—	—	—	—	1	—	—	1
Inflammatory diseases of central nervous system ..	—	—	—	—	—	—	1	—	—	1
Haemorrhagic conditions ..	1	—	—	—	1	—	—	—	—	1
Accidental mechanical suffocation	—	—	1	—	1	2	1	—	—	3
Injury at Birth	14	1	1	—	16	—	—	—	—	16
Congenital Malformation ..	10	5	3	3	21	10	—	1	—	32
Prematurity & Immaturity ..	13	—	—	—	13	—	—	—	—	13
Post natal asphyxia and atelectasis	22	—	—	—	22	—	—	—	—	22
Gastro Enteritis	—	—	—	—	—	1	—	—	—	1
All other causes	4	—	—	—	4	2	—	1	—	7
All causes	70	6	5	4	85	22	11	5	1	124
Percentage	56.5	4.8	4.0	3.2	68.5	17.8	8.9	4.0	0.8	100

TABLE SHOWING POPULATION, BIRTH-RATES, DEATH-RATES, ZYMOTIC DEATH-RATES, INFANT AND MATERNAL MORTALITY RATES
OF THE 20 LARGE TOWNS OF ENGLAND AND WALES FOR 1956

	England and Wales	Birmingham	Bradford	Bristol	Cardiff	Coventry	Croydon	Kingston- upon-Hull	Leeds	Leicester	Liverpool	Manchester	Newcastle- upon-Tyne	Nottingham	Plymouth	Portsmouth	Salford	Sheffield	Southampton	Stoke-on-Trent	Sunderland
R.G.'s estimated popula- tion		1,110,800	286,400	440,500	249,800	272,600	249,300	300,200	508,600	284,000	773,700	686,200	277,100	312,500	216,200	231,100	167,400	499,000	196,400	273,000	182,800
Comparability factor :																					
(a) births		0.94	1.00	0.99	0.94	0.95	0.99	0.96	0.98	0.99	0.93	0.96	0.96	0.95	1.02	1.05	0.96	1.01	0.98	0.94	0.94
(b) deaths		1.08	0.95	0.88	1.12	1.37	0.83	1.24	1.15	1.06	1.23	1.18	1.14	1.13	1.09	0.95	1.23	1.13	1.11	1.31	1.25
Crude birth rate per 1,000 population	15.7	16.63	16.8	15.14	17.88	17.02	14.5	18.58	15.8	15.4	20.60	17.44	17.73	16.50	16.31	15.08	16.88	14.11	16.92	15.6	20.48
Birth rate as adjusted by factor		15.63	16.8	14.99	16.81	16.1	14.4	17.84	15.5	15.2	19.16	16.74	17.02	15.67	16.64	15.83	16.20	14.25	16.58	14.7	19.25
Crude death rate per 1,000 population	11.7	10.88	14.1	12.25	11.24	8.3	11.7	10.7	11.3	11.3	11.43	12.35	11.83	11.15	11.28	12.22	12.30	11.73	10.51	11.1	10.2
Death rate as adjusted by factor		11.75	13.4	10.78	12.59	11.3	9.9	13.3	13.0	12.0	14.05	14.57	13.49	12.60	12.29	11.61	15.13	13.25	11.67	14.5	12.74
Infantile mortality rate per 1,000 live births ..	23.8	24.6	28.2	19.34	27.76	26.7	19.0	28.86	26.9	19.7	25.91	29.92	24.628	21.92	17.58	24.10	29.37	23.6	30.08	27.0	25.38
Neonatal mortality rate per 1,000 live births ..	16.9	17.6	19.3	14.54	19.03	21.1	10.0	19.18	19.0	13.7	17.36	20.14	17.708	15.11	13.05	16.35	20.17	18.0	20.76	18.13	16.83
Stillbirth rate per 1,000 total births	23.0	22.95	25.08	24.86	25.7	19.46	20.0	24.48	21.6	23.3	24.11	26.36	28.86	23.67	23.80	24.89	28.20	21.95	26.93	30.58	24.24
Perinatal mortality rate per 1,000 total births ..		37.44	41.7	36.70	41.00	36.1	28.0	36.2	37.5	36.2	38.68	43.77	43.882	35.61	35.44	37.48	45.05	37.2	42.74	46.32	38.0
Maternal mortality rate per 1,000 total births ..	0.56	0.63	0.41	0.292	0.66	0.42	—	0.71	0.61	0.45	0.43	0.24	1.186	0.76	0.27	0.28	1.03	—	0.59	0.228	0.52
Tuberculosis rates per 1,000 population :																					
(a) Primary notifications																					
Respiratory		0.93	0.85	0.690	1.18	1.5	0.746	0.89	0.81	0.78	1.313	0.86	1.231	1.04	1.05	0.65	0.681	0.801	1.07	0.978	1.28
Non-respiratory ..		0.10	0.07	0.109	0.12	0.17	0.092	0.09	0.11	0.092	0.130	0.08	0.245	0.11	0.08	0.06	0.06	0.074	0.05	0.11	0.15
(b) Deaths																					
Respiratory	0.11	0.14	0.09	0.084	0.14	0.14	0.100	0.15	0.11	0.095	0.177	0.15	0.148	0.11	0.12	0.11	0.197	0.184	0.127	0.216	0.14
Non-respiratory ..	0.01	0.01	0.01	0.014	0.004	0.018	0.004	0.013	0.02	0.011	0.009	0.02	0.011	0.01	0.00	0.004	0.006	0.020	0.015	0.011	0.01
*Death rates per 1,000 population from :																					
Cancer (all forms including Leukaemia and Aleukaemia) ..	1.66	2.08	2.33	2.11	2.08	1.7	2.375	2.04	1.94	2.02	2.054	2.23	2.132	2.01	1.83	2.09	2.449	2.188	2.20	2.989	2.05
Cancer—Lungs & Bronchus	0.407	0.45	0.46	0.40	0.396	0.351	0.521	0.48	0.44	0.363	0.579	0.59	0.458	0.42	0.33	0.42	0.621	0.535	0.51	0.491	0.43
Meningococcal Infections		0.00	0.007	0.00	0.012	0.00	0.00	0.006	0.00	—	0.005	0.01	0.0036	0.00	0.00	—	—	0.008	0.02	0.00(36)	—
Whooping Cough ..		0.01	0.00	—	—	0.00	—	0.003	0.00	—	0.006	—	0.0036	—	—	—	0.006	—	—	—	—
Influenza		0.03	0.04	0.14	0.04	0.01	0.04	0.035	0.05	0.056	0.022	0.05	0.0288	0.05	0.05	0.01	0.048	0.040	0.04	0.022	0.03
Measles		0.00	0.00	—	—	0.00	—	—	—	—	—	—	—	0.00	—	—	—	—	—	—	—
Acute Poliomyelitis and Encephalitis		0.01	0.00	—	0.012	0.00	0.00	0.003	—	—	0.001	0.01	—	—	—	—	0.12	0.002	—	—	—
Diarrhoea (under 2 years)		0.02	0.024	0.00	0.004	0.02	0.00	0.01	0.02	0.007	0.006	0.01	—	0.01	0.00	0.03	—	0.008	0.01	0.007(3)	—
Diarrhoea (under 2 years) per 1,000 live births ..		0.97	1.45	0.30	0.22	1.72	1.38	0.57	1.37	0.46	0.314	0.50	—	0.58	0.28	2.01	—	0.57	0.30	0.047	—

*Where no deaths have occurred at all, a "dash" is inserted. Where the number of deaths is too small to express as a rate, the figures 0.00 are inserted.

The following table, compiled from figures supplied by the Registrar-General, shows the causes of death at various ages during 1956 :—

CAUSES OF DEATH	ALL AGES			AGE GROUPS							
	M.	F.	Total	Under 1 yr.	1-5 yrs.	5-15 yrs.	15-25 yrs.	25-45 yrs.	45-65 yrs.	65-75 yrs.	75 and over
1. Tuberculosis of Respiratory System	29	7	36	—	—	—	—	6	21	8	1
2. Other Forms of Tuberculosis	—	1	1	—	—	—	—	—	—	1	—
3. Syphilitic Disease	11	6	17	—	—	—	—	—	8	6	3
4. Diphtheria	—	—	—	—	—	—	—	—	—	—	—
5. Whooping Cough	—	—	—	—	—	—	—	—	—	—	—
6. Meningococcal Infection	2	1	3	1	1	—	—	1	—	—	—
7. Acute Poliomyelitis	—	—	—	—	—	—	—	—	—	—	—
8. Measles	—	—	—	—	—	—	—	—	—	—	—
9. Other Infective and Parasitic Diseases	5	3	8	1	1	1	—	—	2	—	3
Malignant Neoplasm—											
10. Stomach	50	37	87	—	—	—	—	1	32	27	27
11. Lung, Bronchus	87	12	99	—	—	—	—	2	52	34	11
12. Breast	—	47	47	—	—	—	—	8	16	16	7
13. Uterus	—	28	28	—	—	—	—	3	10	10	5
14. Other Malignant and Lymphatic Neoplasm	140	109	249	—	1	—	3	10	81	82	72
15. Leukaemia, Aleukaemia	4	5	9	—	—	—	—	3	4	2	—
16. Diabetes	6	14	20	—	—	—	—	2	4	7	7
17. Vascular Lesions of the Nervous System	129	229	358	—	—	1	1	4	54	98	200
18. Coronary Disease, Angina	327	170	497	—	—	—	—	9	166	158	164
19. Hypertension with heart disease	42	48	90	—	—	—	—	—	19	33	38
20. Other Heart Diseases	115	183	298	1	—	—	1	10	43	72	171
21. Other Circulatory Diseases	68	54	122	—	—	—	—	2	22	34	64
22. Influenza	4	6	10	—	—	—	—	1	3	5	1
23. Pneumonia	67	60	127	22	—	—	1	3	16	35	50
24. Bronchitis	106	44	150	2	—	1	—	2	39	44	62
25. Other Respiratory Diseases	18	8	26	1	—	—	—	1	7	9	8
26. Ulceration of Stomach or Duodenum	16	6	22	—	—	—	—	1	6	8	7
27. Gastritis, Enteritis, Diarrhoea	3	7	10	1	—	—	—	3	3	—	3
28. Nephritis and Nephrosis	14	14	28	—	—	1	2	5	8	7	5
29. Hyperplasia of the Prostate	24	—	24	—	—	—	—	—	1	2	21
30. Pregnancy, Childbirth	—	3	3	—	—	—	1	2	—	—	—
31. Congenital Malformations	18	16	34	32	1	—	—	—	—	1	—
32. Other Defined and Ill-defined Diseases	111	187	298	59	3	3	7	14	38	55	119
33. Motor Vehicle Accidents	20	4	24	—	2	—	4	6	7	2	3
34. All Other Accidents	37	18	55	4	1	—	2	10	11	3	24
35. Suicide	18	9	27	—	—	—	1	5	17	3	1
36. Homicide and Operations of War	1	1	2	—	—	—	—	2	—	—	—
	1,472	1,337	2,809	124	10	7	23	116	690	762	1,077
Percentages of Total Deaths				4.4	0.4	0.3	0.8	4.1	24.6	27.1	38.3
										65.4	

V—NOTIFIABLE DISEASES

Foreword

The incidence of notifiable diseases, with the number admitted to Hospital during the year 1956 is shown in the following table :—

Disease	Number Notified	Notified Cases admitted to Hospital
Scarlet Fever	290	21
Whooping Cough	570	34
Diphtheria	1	1
Measles	122	1
Acute Pneumonia	242	18
Meningococcal Infection	7	4
Paralytic Acute Poliomyelitis	4	4
Non-paralytic Acute Poliomyelitis	13	13
Acute Encephalitis (Infective)	3	1
Acute Encephalitis (post infectious)	2	1
Dysentery	115	25
Ophthalmia Neonatorum	7	—
Puerperal Pyrexia	174	1
Para-Typhoid Fever	1	1
Typhoid Fever	—	—
Food Poisoning	27	13
Erysipelas	48	5
Malaria	1	—

Comments on the Prevalence and Control of Infectious Diseases

Scarlet Fever.—There were 290 notifications, slightly higher than the preceeding year, but within the average over a number of years. The sex distribution was 128 males and 162 females. Only 21 patients were removed to the Isolation Hospital. There were no deaths.

Whooping Cough.—During the year, 570 cases of Whooping Cough were notified. Of these 34 were admitted to the Isolation Hospital. There were no deaths.

The incidence was low until the end of May, with 53 notifications, and the monthly number of cases after that period was as follows :—June 40, July 48, August 54, September 63, October 58, November 122, December 132. The sex relationship of the cases was about equal, 278 males and 292 females.

Notifications of Whooping Cough by age and sex, 1947-56

Year	Under 1 year		1-2 years		2-3 years		3-4 years		4-5 years		5-10 years		10-15 years		15 yrs. and over		Total Sexes		Totals
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
1947	19	25	25	25	20	26	25	28	29	26	31	38	2	1	—	1	151	170	321
1948	47	28	38	47	36	40	23	59	32	63	41	67	—	3	3	4	220	311	531
1949	51	43	50	66	68	87	64	66	52	53	111	90	4	7	1	3	401	415	816
1950	59	52	57	51	64	73	70	87	60	98	83	108	2	3	4	6	399	478	877
1951	79	65	90	86	105	92	106	123	118	99	127	138	3	7	6	23	634	633	1,267
1952	25	30	21	25	36	35	36	25	28	29	58	54	1	2	1	2	206	202	408
1953	72	45	68	54	73	67	63	71	79	99	160	206	1	4	1	7	517	553	1,070
1954	25	33	25	19	34	38	22	36	31	36	77	85	1	2	—	3	215	252	467
1955	6	13	3	6	9	12	6	11	5	10	13	16	1	—	—	1	43	69	112
1956	30	41	16	15	30	28	33	35	41	40	122	121	6	9	—	3	278	292	570

The percentage of the total cases in age groups up to 10 years illustrates the shift to the right in age incidence. This is illustrated by the following table :—

Percentage of total cases shown in Age Groups, 1947-56

Year	Under 1 year	1-2 years	2-3 years	3-4 years	4-5 years	5-10 years
	%	%	%	%	%	%
1947	13.7	15.6	14.3	16.5	17.5	21.2
1948	14.1	16.0	14.3	15.4	18.3	20.3
1949	11.4	14.2	19.0	16.0	12.8	24.6
1950	12.6	12.3	15.6	17.9	18.0	12.2
1951	11.3	13.1	15.5	18.0	17.3	20.9
1952	13.5	11.3	17.4	14.9	14.0	27.4
1953	10.9	11.4	13.9	12.5	16.6	34.2
1954	12.4	9.4	15.5	12.4	14.3	35.3
1955	16.9	8.0	18.8	15.2	13.4	25.9
1956	10.7	5.4	10.2	12.0	14.2	42.6

In the tables below are the births for the years 1951 to 1956 ; the number of children in age groups, who have received protective treatment and the percentage of children of the different age groups who have been protected against whooping cough.

Children Protected against Whooping Cough

Year	No. of Births	NUMBER PROTECTED					Total
		Under 1 year	1-2 years	2-3 years	3-4 years	4-5 years	
1951	4,327	—	—	—	—	—	2,000
1952	4,351	—	—	—	—	—	2,000
1953	4,421	1,377	437	111	48	19	1,992
1954	4,492	2,425	766	138	68	16	3,413
1955	4,187	2,483	921	49	20	11	3,483
1956	4,467	2,987	763	48	23	16	3,837

It is not possible to give the age groups of those treated in the years 1951 and 1952. Treatment at that time was carried out by the Medical Research Council.

**Percentage of Children of the different age groups protected against
Whooping Cough**

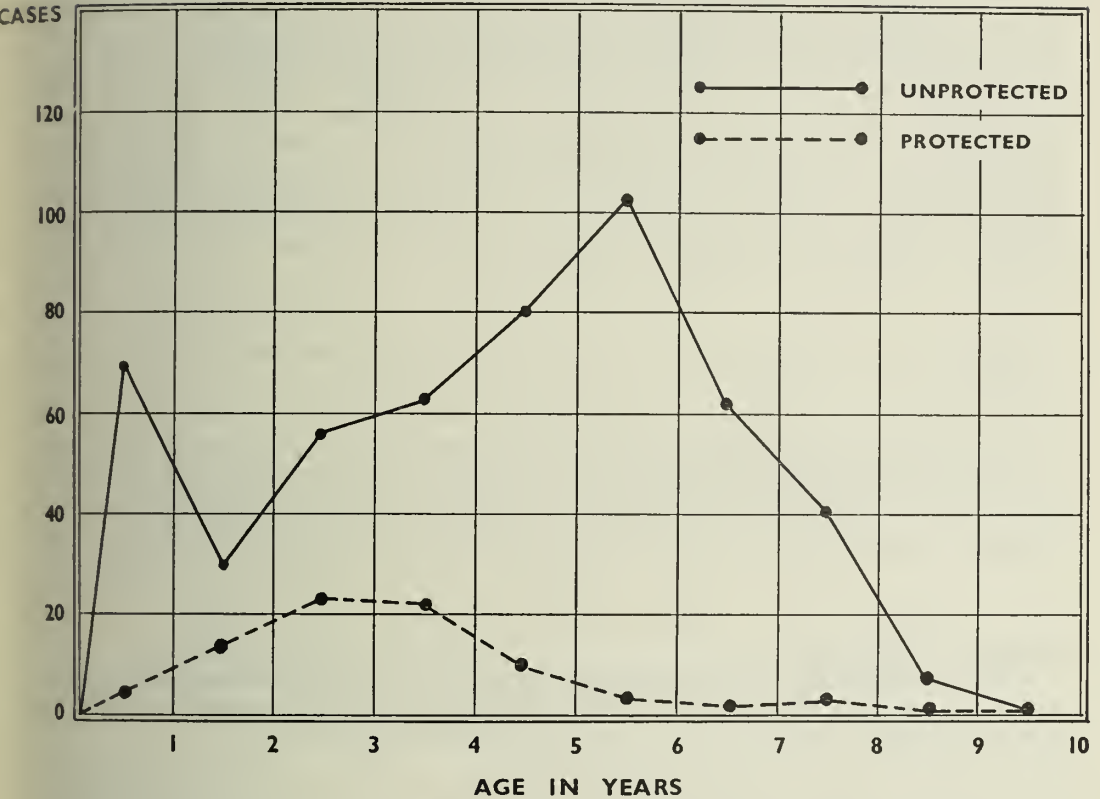
Year	Under 1 year	1-2 years	2-3 years	3-4 years	4-5 *
	%	%	%	%	
1953	31.1	10.0	2.6	*	
1954	54.6	48.5	10.9	4.1	
1955	59.3	74.5	49.6	13.7	
1956	66.8	75.1	75.6	50.1	

* Figures not available. See note to previous table.

AGE AND SEX OF CASES OF WHOOPING COUGH WHICH OCCURRED IN THE PROTECTED GROUP IN 1956

Year Combined or Whooping Cough Vaccine was given	Under 1 year		1-2 years		2-3 years		3-4 years		4-5 years		5-6 years		6-7 years		7-8 years		8-9 years		9-10 years		10-15 years		15-25 years		25-35 years		35-45 years		Total		
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	Total		
1956	2	2	3	5	-	1																							5	8	13
1955	-	-	2	1	7	6	-	1																					9	8	17
1954			-	1	7	3	10	8	2	-																			19	12	31
1953							1	2	4	3	1	-																	6	5	11
1952											2	-	1	-															3	-	3
1951															-	2													-	2	2
TOTAL ..	2	2	5	7	14	10	11	11	6	3	3	-	1	-	-	2													42	35	77

WHOOPING COUGH MORBIDITY DURING 1956 IN PROTECTED AND UNPROTECTED GROUPS



A clearer picture is now beginning to emerge regarding the local effort to control whooping cough in the young by active immunisation. It will be noted that by the use of the combined diphtheria and whooping cough vaccine a substantial number are now receiving prophylaxis. Incidence is substantially lower in the protected group of children up to 5 years, whereas infection is being shifted to older children when they first go into the infants' school. This shift to the right in age incidence has been a feature of whooping cough ever since immunisation on a large scale has been attempted, but in Cardiff it is now well illustrated. There is no doubt that this is most desirable.

Diphtheria

One case was notified during the year. There were no deaths.

The patient was a male of 11 years of age living in the Canton district. He was taken ill on the 25th January with inflamed neck glands, followed on the 26th January by a high temperature. He was removed to Hospital on the 27th January. Throat and nasal swabs were taken by the Medical Superintendent (Dr. G. E. Harries) which revealed that the boy was suffering from a virulent diphtheria of the gravis type. Immediate steps were taken to trace the source of infection and to prevent any further cases. Home contacts and children living in the same street were swabbed nose and throat, and all

had negative results. At the school the patient attended, enquiries were made of the Head Teacher of children who had been absent through illness during the past two weeks. All the absentees were visited at their homes and nasal and throat swabs taken of each child. The results were all negative. One girl aged 10 years who had just returned to school after an absence of 5 weeks, had been ill with tonsillitis and blurred vision. Swabs of nose and throat were taken and the nasal swab was positive to the diphtheria organism (Gravis type). Two classes in the school were inspected by a Medical Officer of the Department and swabs of nose and throat were taken from each child. One class was that attended by the patient from whom the organism was recovered, and in this class a girl of 8 years gave a positive throat swab (Gravis type). The other class was that attended by the girl who had been absent for 5 weeks and had returned. All the swabs from this class were negative. Both girls who gave positive swabs were admitted to the Isolation Hospital and diagnosed as diphtheria carriers. No further cases occurred in the area.

The patient made an uneventful recovery and the carriers were cleared of the organism.

In the follow-up, 84 persons were swabbed. The parents were questioned as to whether the male patient had been immunised and it was ascertained that he was protected when he was about 1 year old, but through frequent illnesses his attendance at school was very irregular and he missed the opportunity of having a booster dose.

Diphtheria Immunisation

Active propaganda inducing parents to have their children protected was carried out as usual. During the year 4,227 children received primary treatment protective against diphtheria. This was 422 more than the previous year.

Immunisation continued throughout the whole year and the mobile unit was a great asset to parents in the new housing estates which have reached such dimensions as to make it almost impossible for mothers of large families to attend the clinic nearest to their home.

The number of children immunised by private practitioners was 400, which is about the same as in the preceding year.

The place at which the children were immunised is of interest, namely :—

Special Clinics for combined Diphtheria and Pertussis immunisation	1,569
Mobile Units for nurse visiting the home ..	1,146
Infant Welfare Clinics	943
Schools	169
Private Practitioners	400
	<hr/>
	4,227
	<hr/>

Children immunised against diphtheria only, numbered 382

The report now required by the Ministry of Health has altered the picture of immunisation because no child is now shown as being immunised unless he has received a booster dose within five years of his primary immunisation. The return is set out as follows:—

Number of children at the 31st December, 1956, who had completed a course of immunisation before that date (i.e. at any time since 1st January, 1942)

Age on 31/12/56 (i.e., born in year)	Under 1 year 1956	1-4		5-9		10-14		Total under 15 years
		1955	1952	1951	1947	1946	1942	
A. Last complete course of injections (whether primary or booster 1952-1956 ..	941	13,796		15,824		12,527		43,088
B. 1951 or earlier ..				5,678		7,501		13,179
C. Estimated mid-year child population	4,320	16,680		40,100				61,100
Immunity Index 100 A/C	21.8%	82.7%		70.7%				70.5%

In the previous year the immunity index figure was given as 68 per cent. This year it has reached 70.5 per cent which is quite an achievement on the basic population of 61,100.

Apart from the primary immunisation, other work in connection with diphtheria immunity may be summarised as follows:—

Number under 5 years posterior Schick negative ..	nil
Number between 5—15 years	4,516
Number under 15 years posterior Schick positive ..	215
Number between 5—15 years who were given a booster injection without a Schick test	2,882

Measles.—The number of cases of measles notified during the period was 122. This low incidence is accounted for by the substantial epidemic which occurred in 1955, when 6,869 cases were notified. During the year only 1 case was admitted to the Isolation Hospital.

The cases notified for the past 5 years are:—

1952—2,625; 1953—1,837; 1954—33; 1955—6,869; 1956—122

Pneumonia.—The notified cases totalled 242 and this was slightly lower than the preceding year. Some cases of the influenzal type were notified during the early months of the year, but not above the average. Eighteen of the notified cases were removed to the Isolation Hospital; many more were admitted to general hospitals in and around Cardiff. Deaths cannot be correlated with the notifications because the Registrar General's heading "Pneumonia" covers deaths from all types of pneumonia.

The age and sex distribution of the cases for 1956 are shown below:—

0-1 year		1-2 years		2-3 years		3-4 years		4-5 years		5-10 years		10-20 years		20-45 years		45-65 years		65 yrs. & over		Total Sexes		Grand Total
M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
0	1	1	3	-	-	1	2	2	1	10	7	5	5	39	14	56	39	26	30	140	102	
																						242

The cases notified for the past 5 years are:—

1952—182; 1953—232; 1954—191; 1955—265; 1956—242

Meningococcal Infection.—Seven cases were notified during the year, this being the lowest incidence since 1952. Of these, four were admitted to the Isolation hospital. The total number of cases with a tentative diagnosis of meningococcal infection admitted to the Hospital was 70, and this included two cases from the Port Health District. There were two deaths, a female of 1 year and a male of 25 years. The child died on the 7th January and the man on the 17th March. The latter case was not notified.

The age and sex distribution of the cases were as follows :—

0-1 year		1-2 years		2-3 years		3-4 years		4-5 years		5-10 years		10-20 years		20-45 years		45-65 years		65 yrs. & over		Total Sexes		Grand Total
M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
-	-	-	2	-	-	2	-	1	-	1	-	-	-	-	1	-	-	-	-	4	3	7

The number of cases for the past 5 years was as follows :—

1952—6; 1953—10; 1954—15; 1955—14; 1956—7

Acute Poliomyelitis (Paralytic and Non-paralytic).—The number of cases occurring in the City was 17. This was below the average for the past five years. Only four were of the paralytic type and the remainder were non-paralytic. There were no deaths.

Two of the paralytic type cases occurred in the first quarter of the year, one during the week ended 21st January and the other during the week ended 17th March. The other two occurred during the weeks ended 18th and 25th August respectively. The first cases of the non-paralytic type occurred during the week ended 8th September, when 4 cases were confirmed; 5 were single cases occurring in separate weeks; two cases were confirmed during the week ended 27th October; and the last two cases during the week ended 22nd December.

The number of cases and dates when they occurred are set out in the table below :—

Week ending	Jan. 21	Mar. 17	Aug. 18	Aug. 25	Sept. 8	Sept. 15	Sept. 22	Oct. 6	Oct. 27	Nov. 10	Nov. 24	Dec. 22	Total
Paralytic ..	1	1	1	1									4
Non-paralytic ..					4	1	1	1	2	1	1	2	13

All the cases were fully investigated and there appeared to be no connection with any known cases.

The age and sex distribution of the cases were as follows :—

		2-3 years		3-4 years		4-5 years		5-10 years		10-15 years		20-25 years		25-35 years		35-45 years		Total
		M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
Paralytic ..								-	2					1	1			4
Non-paralytic ..		1	-	-	1	1	1	1	1	3	1	1				-	1	13

One of the paralytic cases, was a patient who had been brought to the Cardiff Royal Infirmary from Caerphilly. Of the other three cases, two were affected in the lower limbs and the other in the left upper arm and shoulder. On discharge from hospital one case was referred to St. David's Hospital Orthopaedic Department and the other two to the Prince of Wales' Orthopaedic Hospital for further treatment.

The number of admissions to the Isolation Hospital was 27, but of these, only 13 were diagnosed as poliomyelitis, four other cases admitted as meningitis were diagnosed finally as non-paralytic poliomyelitis.

The case and sex distribution for the past five years are set out in the following table.

Year	Under 1 yr.		1-3 years		3-5 years		5-10 years		10-15 years		15-25 years		25-35 years		35-45 years		45-65 years		65 yrs. & over		Total Sexes		Grand Total
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
1952	2	—	4	1	2	4	3	3	1	2	—	—	1	2	1	—	1	—	—	—	15	12	27
1953	—	—	3	3	3	3	3	4	1	2	—	2	2	2	1	—	1	—	—	—	14	16	30
1954	—	—	1	1	—	1	4	5	1	—	—	2	1	—	—	1	—	—	—	—	7	10	17
1955	1	—	3	3	3	3	4	7	4	1	2	1	2	4	—	—	—	—	—	—	19	19	38
1956	—	—	1	—	1	2	1	3	1	3	1	1	1	1	—	1	—	—	—	—	6	11	17

Poliomyelitis Vaccination.—On the 29th January the Welsh Board of Health issued Circular 2/56 (Wales) giving proposals for the use of a vaccine against poliomyelitis. The vaccine was believed to give a high degree of protection. It would be offered to local authorities free of charge and the amount that would be issued would depend on the batches which would pass the very stringent safety tests. The vaccination was to be carried out on a voluntary basis and would be made available to children born in years 1947-1954.

To prepare a register of those children whose parents wished to take advantage of this protective treatment, the following steps were taken—(1) All parents of children born in the years 1951-1954 were sent a letter explaining the treatment and its value so far as was known. On the reverse side of the letter was a form on which application for the protective treatment could be made. The names of the children were obtained from the birth inquiry cards and 12,840 letters were sent out through the Post. (2) The older children (those born between 1947-1950) were dealt with through the kind co-operation of the Director of Education who arranged the distribution of some 22,000 letters to the children in the infants and lower classes of the junior schools. When the wishes of the parents had been made known on the form, the forms were also returned through the schools. (3) A notice was inserted in the morning and evening editions of local newspapers and one local weekly newspaper giving parents particulars of the ages of children to whom vaccine was to be made available and where they may obtain a form to register their children. These measures resulted in 17,395 children being registered for vaccination. The child population of the age groups between 1947 and 1954 was estimated as 38,000, therefore 45.76 per cent were registered.

The first injections were given on the 4th May and the work continued until the middle of June, when further issues of vaccine were postponed until the Autumn. During the year 1,846 children had the complete course of injections and 160 had one injection only.

Encephalitis Infective.—Three cases were notified during the year. The history of two of the cases was very vague and both died. One was a female child of 2 years who died on 3rd March, and the other a male child of 9 years who died on 8th May. The boy was a patient at the Cardiff Royal Infirmary and the other child died at home. The third case was that of a female of 30 years who developed Herpes Zoster about the same time. This patient recovered.

The number of cases notified during the past five years was as follows :—

1952—nil ; 1953—1 ; 1954—nil ; 1955—nil ; 1956—3

Encephalitis, Post-Infective.—There were two cases notified. One patient was a man of 40 years who was admitted to the Isolation Hospital and died two days later, suffering from influenzal encephalitis; the second patient was a female of 33 years who had mumps and developed encephalitis seven days later. She was admitted to the Isolation Hospital and made a normal recovery.

The number of cases notified during the past five years was as follows :—

1952—1; 1953—nil; 1954—3; 1955—1; 1956—2

Erysipelas.—Out of the 48 cases notified, 5 were removed to the Isolation Hospital. It is not known whether any deaths occurred from this disease as they are not classified separately in the Registrar's returns.

During the past five years the number of cases notified was as follows :—

1952—42; 1953—51; 1954—35; 1955—37; 1956—48

Gastro Intestinal Infections

Typhoid Fever.—No cases occurred during the year.

Paratyphoid Fever.—One case of paratyphoid fever was notified. The patient was a male of 13 years and he became ill in August. Inquiries as to the source of infection showed that it was unlikely that he had been infected by food. He was a lad who bathed daily in the River Taff at the northern reaches in the Cardiff area. Water samples taken at the spot revealed the presence of the paratyphoid organism. The water samples were taken by Dr. McKim Thomas, Medical Officer of Health, Cardiff Rural District Council, to whom I am grateful for his co-operation. The patient made a satisfactory recovery.

The number of cases notified during the past five years was as follows :—

1952—86; 1953—3; 1954—89; 1955—8; 1956—1

Dysentery.—During the year, 115 cases of dysentery were notified, this being 181 less than in the previous year. All were of Shigelle Sonnei type, except in three instances where no faecal specimens were taken and the organisms not identified. Children under 10 years accounted for 88 cases. There were 25 admissions to the Isolation Hospital, mostly from the Nursery of Ely Children's Homes, and Green Farm Hostel. Cases occurring in institutions totalled 35 and in Nursery Schools 16. The vigilance of the staff at the Ely Children's Homes and in the Nursery Schools accounted for the low incidence. Children are rarely ill from this infection. It is not surprising, therefore, that frequently a child is brought to a Nursery School and found to have diarrhoea, which as a result of routine swabbing is found to be Sonne Dysentery.

Routine swabbing of new admissions to the Ely Children's Homes and Green Farm Hostel has been carried out for some time with much success. The prompt measures adopted are responsible, no doubt, for the lower incidence this year. No chemoprophylaxis treatment was resorted to during this period.

The number of cases notified during the past five years was as follows :—

1952—235; 1953—22; 1954—229; 1955—296; 1956—115

Food Poisoning.—There were 27 cases notified, and except for one family outbreak (in which 6 persons were affected, but only one was notified), all the others were single cases.

The organism, which was isolated in the Public Health Laboratory in 21 cases, was *Salmonella Typhi murium*. In three instances no faecal swabs were submitted to the Public Health Laboratory.

The particulars in the table below are set out in the manner prescribed by the Ministry of Health :—

Total number of outbreaks	Number of Cases	Number of Deaths	Organism	Food involved
1 (family)	21	nil	Salmonella Typhi Murium	Unknown
	6	nil	Unkown	

The number of cases of food poisoning notified during the past five years was as follows :—

1952—26 ; 1953—29 ; 1954—21 ; 1955—47 ; 1956—27

Vaccination against Smallpox.—The persons vaccinated numbered 2,556. This is the highest figure since 1952. Propaganda for the vaccination of the infant continues to be stressed by medical officers and health visitors who visit the home shortly after the birth of the baby. It is also pointed out that in circumstances such as going abroad, certain occupations (such as nursing), and joining Her Majesty's Forces, if primary vaccination has been carried out in infancy there are far less possibilities of serious reactions taking place on revaccination. The numbers of persons vaccinated and revaccinated by their family doctors were 715 and 336 respectively.

For comparison with previous years, the table below shows the vaccinations and the total live-births for the past ten years. To this is added a column showing the vaccinations performed as a percentage of the births for each year, but obviously, as the treatment is not carried out before the child is 3 months old, but chiefly when it is between 3 and 12 months old, the vaccinations for any particular year cannot be strictly related to the births for the same year.

<i>Year</i>	<i>Vaccinations</i>	<i>Births</i>	<i>Percentage of Vaccinations to Births</i>
1947	2,161	5,299	40.8
1948	1,699	4,875	34.9
1949	1,910	4,760	40.1
1950	2,350	4,402	53.4
1951	3,067	4,234	72.4
1952	2,568	4,351	59.0
1953	2,315	4,421	52.4
1954	2,383	4,320	55.2
1955	2,298	4,187	54.6
1956	2,556	4,467	57.0

In the following table, vaccinations and revaccinations are shown in separate age groups. The work done by private practitioners is also indicated. Private practitioners performed 41.1 per cent of the vaccinations, which is slightly less than in 1955.

		<i>By Public Health Dept.</i>	<i>By Private Practitioners</i>	<i>Total</i>
PRIMARY VACCINATIONS				
Under 1 year	..	1,397	521	1,918
1 to 2 years	..	19	31	50
2 to 4 years	..	7	31	38
5 to 14 years	..	6	45	51
15 years and over	..	22	87	109
TOTALS	..	1,451	715	2,166
Insusceptible ..	..	16	15	30

REVACCINATIONS		<i>By Public Health Dept.</i>	<i>By Private Practitioners</i>	<i>Total</i>
Under 1 year	..	—	—	—
1 to 2 years	..	—	1	1
2 to 4 years	..	—	11	11
5 to 14 years	..	6	34	40
15 years and over	..	48	290	338
		<hr/>	<hr/>	<hr/>
TOTALS	..	54	336	390
		<hr/>	<hr/>	<hr/>
Insusceptible	..	2	2	4

No cases of post-vaccinal encephalitis were reported during the year.

CITY ISOLATION HOSPITAL

The total number of patients admitted to the Cardiff Isolation Hospital was 811. Of these, 504 were residents of the City. The decline in the number of admissions is accounted for largely by the absence of measles. In the following table the Cardiff cases are classified as "disease on admission" and "disease as diagnosed in hospital" :—

		<i>Disease on admission</i>	<i>Disease as diagnosed in hospital</i>
Diphtheria	.. ..	15	1
Scarlet Fever	.. ..	32	38
Whooping Cough	.. ..	45	40
Pneumonia	.. ..	45	39
Poliomyelitis (Paralytic)		4	3
(Non-paralytic)		23	10
Measles	.. ..	5	2
Meningitis	.. ..	68—2 Port cases	8—1 Port case
Tuberculosis	.. ..	38	33
Encephalitis Acute Infective		2	1
Encephalitis Post Infectious		1	2
Dysentery	.. ..	78	63
Paratyphoid Fever	.. ..	4	1
Typhoid Fever	.. ..	1	—
Erysipelas	.. ..	11	7
Chicken Pox	.. ..	26	24
Food Poisoning	.. ..	10	17
Glandular Fever	.. ..	4	8
Miscellaneous	.. ..	86	202—1 Port case
Miscellaneous Hospital Staff		4	4

Total number of patients admitted—811

Total number of patients normally resident in Cardiff—504

Number of patients resident outside Cardiff—307

CLASSIFICATION BY AGE AND SEX OF INFECTIOUS DISEASES CASES FOR YEAR 1958

Disease	Under 1 year		1-2 years		2-3 years		3-4 years		4-5 years		5-10 years		10-15 years		15-20 years		20-25 years		25-35 years		35-45 years		45-65 years and over		All Ages				
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	Total		
Scarlet Fever ..	1	2	4	3	9	4	13	11	18	13	62	104	14	20	5	3	1	-	-	1	-	-	-	1	-	128	162	290	
Whooping Cough ..	30	41	16	15	30	28	33	35	41	40	122	121	6	9	-	-	-	1	-	-	2	-	-	-	278	292	570		
Diphtheria ..	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	1	-	1		
Measles ..	5	7	10	6	11	6	11	7	7	8	18	20	-	2	1	2	-	1	-	-	-	-	-	-	63	59	122		
Acute Pneumonia ..	-	1	1	3	-	-	1	2	2	1	10	7	1	1	4	4	8	3	15	5	16	6	56	39	26	140	102	242	
Meningococcal Infection ..	-	-	-	2	-	-	2	-	1	-	1	-	-	-	-	-	-	1	-	-	-	-	-	-	4	3	7		
Paralytic Acute Poliomyelitis ..	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	1	1	-	-	-	-	-	1	3	4	
Non-Paralytic Acute Poliomyelitis ..	-	-	-	-	1	-	-	1	1	1	1	1	3	1	-	1	1	-	-	-	-	1	-	-	7	6	13		
Acute Encephalitis Infective ..	-	-	-	-	-	1	-	-	-	-	1	-	-	-	-	-	-	-	-	1	-	-	-	-	1	2	3		
Acute Encephalitis Post Infectious ..	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	1	1	2	
Dysentery ..	6	5	6	9	8	2	11	7	7	7	12	8	4	2	2	1	2	3	2	2	2	2	3	1	-	65	50	115	
Ophthalmia Neonatorum ..	4	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	3	7		
Puerperal Pyrexia ..	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	64	-	83	-	14	-	1	-	-	174	174		
Small Pox ..	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Para-Typhoid Fever ..	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	1	-	1		
Enteric or Typhoid (Exc. Paratyphoid) ..	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Erysipelas ..	-	-	-	-	-	-	-	-	-	-	-	1	-	2	1	1	1	1	1	1	4	4	9	14	8	1	23	25	48
Chicken Pox ..	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Malaria { Contracted in this Country Contracted Abroad Induced ..	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1	-	1	
Food Poisoning ..	1	-	1	3	2	1	1	2	-	-	3	1	1	1	1	2	-	-	1	4	1	1	1	-	-	13	14	27	
Typhus Fever ..	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Tuberculosis—Respiratory ..	-	-	4	-	1	2	2	1	3	1	7	10	3	2	14	17	17	18	23	28	29	16	61	21	11	3	175	119	294
Meninges ..	-	-	1	-	-	-	-	-	-	-	-	-	-	1	1	-	-	1	1	-	-	-	-	-	-	3	2	5	
Others ..	-	-	-	-	-	-	1	1	1	1	2	-	1	1	1	1	3	4	1	1	-	1	5	2	-	15	11	26	

CASES OF ACUTE INFECTIOUS DISEASES NOTIFIED IN MUNICIPAL WARDS AND CASES REMOVED TO CITY ISOLATION HOSPITAL
PERIOD—YEAR 1956

Municipal Wards	Measles	Whooping Cough	Scarlet Fever	Diphtheria	Pneumonia	Puerperal Pyrexia	Meningococcal Infection	Acute Poliomyelitis		Acute Encephalitis		Dysentery	Ophthalmia Neonatorum	Erysipelas	Malaria	Food Poisoning	Enteric Fever	Para Typhoid Fever	Tuberculosis		
								Para-lytic	Non-Para-lytic	Post-Infec-tious	Pre-Infec-tious								Respira-tory	Menin- ges C.N.S.	Others
Central ..	6	9	6	—	10	1	2	—	1	—	1	3	1	—	—	1	—	—	9	1	1
South ..	7	35	12	—	20	—	—	—	—	—	—	8	—	1	1	—	—	—	25	—	1
Cathays ..	11	9	6	—	18	1	—	—	1	—	—	4	1	—	—	1	—	—	16	—	2
Adamsdown ..	4	20	11	—	18	—	—	1	—	—	—	13	—	6	—	4	—	—	38	—	3
Riverside ..	5	20	11	—	17	—	—	—	—	—	—	7	1	2	—	—	—	—	18	—	1
Canton ..	5	24	12	1	10	—	—	—	2	—	—	5	—	2	—	—	—	—	16	—	2
Grange town ..	1	24	13	—	9	—	—	—	—	—	—	1	—	3	—	—	—	—	14	—	1
Roath ..	10	56	41	—	9	—	2	—	3	1	—	7	—	5	—	8	—	—	28	—	2
Plasnewydd ..	1	15	15	—	15	—	—	—	—	—	—	1	1	2	—	—	—	—	11	—	2
Splott ..	4	67	29	—	26	2	—	—	—	—	—	7	—	7	—	2	—	—	18	—	1
Penylan ..	17	72	36	—	27	2	—	—	2	1	1	3	—	2	—	3	—	—	19	1	1
Llandaff ..	15	53	35	—	15	1	—	—	—	1	—	5	—	5	—	3	—	—	22	—	—
Gabalfa ..	25	26	18	—	29	—	—	1	1	—	—	—	1	8	—	2	—	1	25	1	3
Ely ..	10	140	43	—	15	4	3	1	3	—	—	16	1	2	—	1	—	—	33	2	6
Institutions ..	1	—	2	—	4	163	—	1	—	—	—	35	1	3	—	2	—	—	2	—	—
TOTALS ..	122	570	290	1	242	174	7	4	13	3	2	115	7	48	1	27	—	1	294	5	26
Cases removed to hospital ..	1	34	21	1	18	1	4	4	13	1	1	25	—	5	—	13	—	1	204	5	15

VI—TUBERCULOSIS

Dr. A. H. GRIFFITH, Senior Medical Officer

I—Review of the Preventative Work carried out during 1956

In order that preventative measures against tuberculosis can be maintained as efficiently and as effectively as possible, there must be frequent modifications and improvements in these measures and the way in which they are applied. That is why certain alterations were introduced into the tuberculosis prevention services of the Council during 1956.

Routine domiciliary tuberculosis visiting was carried out as usual by the district health visitors who were also responsible for the health visiting of infants, school children and the aged in their districts. The system of tuberculosis health visiting and record keeping was, however, greatly simplified in 1956, when desk wallets were issued to all the health visitors. These wallets contained a record card for every case in the health visitor's district and this card contained all the essential relevant information regarding the patient, his home contacts and his environment. It also contained adequate space for follow-up information to be inserted. A visible colour system on the bottom of these cards gave a quick indication which cases demanded concentrated efforts on the part of the health visitors and which cases could be left alone as comparatively safe from the preventative aspect. Different coloured signals on the records indicated which cases were refusing treatment or supervision at the chest clinic, which contacts had not been x-rayed or in the case of child contacts, had not been tuberculin tested or given B.C.G. and in which cases the home or working conditions were unsatisfactory having regard to the patient's health and the risk to others. The absence of a coloured signal on a case record card indicated that the case was satisfactory in all its aspects as far as preventative work was involved. This simple colour system was a continuous reminder to health visitors of the essentials of tuberculosis health visiting; it pointed out clearly which cases had to be visited and it was extremely easy to extract information from these records.

There was an improvement in the preventative services in how they were applied to the cases, the contacts and the environment.

(a) The Cases

As soon as a new case of tuberculosis was notified the district visitor was required to visit the home, advise on preventative measures regarding the case, the contacts and the conditions in the home. A full report on these matters was then sent to the Medical Officer of Health in order that he could determine whether or not all the necessary precautionary measures were being taken.

With regard to the old tuberculosis cases, the two tuberculosis liaison health visitors, who advise patients at the Chest Clinic regarding personal, financial and environmental problems and supply the chest clinic with information regarding the patient's personal and environmental difficulties, commenced on a third aspect of their work. This involved inserting every 6 months in the record cards of the health visitors, general chest clinic information regarding every case, viz., when he last attended, the state of the disease, whether or not he was on drug therapy, if he was known to be sputum positive and when he was to attend again. This information was, and is invaluable to a tuberculosis health visitor for it allows her to decide which known tuberculosis cases are not making the effort to ensure that they are well or remaining well. These cases require special visiting for many constituted serious sources of infection to others.

Much is written about efficient case finding methods in the community for there are at this moment some 300 unknown, undiagnosed and unsuspected cases of tuberculosis in Cardiff which form a definite infecter pool. This figure is an estimate of the number of cases that would be found if every person in Cardiff attended for Mass Radiography and is based on the findings of Mass Radiography Surveys in England and Wales. Less is said about another 300 known cases of tuberculosis, many known to be suffering from active infectious tuberculosis, who have not attended a chest clinic for at least two years and have refused all forms of treatment or supervision. It is extremely important that these persons must co-operate more if tuberculosis is to be eradicated. Persuading unwilling tuberculosis cases to accept treatment and supervision is a form of preventative work which health visitors in Cardiff have accepted as a challenge.

(b) The Contacts

A coloured signal is inserted in a particular spot of a case record card in the health visitor's desk wallet if all the home contacts of the case have not been x-rayed. If the case is sputum positive the contacts are urged to attend annually for x-ray but where the patient is making satisfactory progress (information regarding this is inserted regularly in the Health Visitor's records) there is little point in repeating the x-ray examination every year. The health visitors are supplied with information each week on which contacts have been x-rayed, which child contacts are tuberculin positive and which child contacts have had B.C.G.

Two contact clinics have been held weekly at the Chest Clinic since early 1956. These contact clinics are conducted by the B.C.G. Health visitors of the local authority and the nursing sisters at the Chest Clinic. Attendance at the contact clinic has been very good, more than 80 persons often attending in a session. X-ray examination and tuberculin testing is carried out at these sessions and the results passed on to the health visitors.

The B.C.G. hostel at Preswylfa, which admitted cases for isolation while they were being vaccinated, ceased to function as such on 1st April, 1956. The B.C.G. clinics which were held there were transferred to Canton Clinic. The Local Health Authority staff continued to give B.C.G. to contacts and it was administered in the Authority's clinics.

The functions of the two B.C.G. health visitors included the tuberculin testing of 13-year old children at school, the home visiting of those found positive, conducting contact clinics at the chest clinic, attendance at the B.C.G. clinics of the local authority and the home visiting of child non-attenders at the contact clinics. These highly specialised health visitors carried equipment with them for tuberculin testing in the home (Heaf multiple puncture tuberculin test) children who could not be brought to the clinic for one reason or another. Mobile B.C.G. vaccination sessions were introduced during the year which meant a medical officer on the Council's staff gave B.C.G. in the homes of children who could not be brought to the clinics. The preliminary tuberculin test in these cases had been carried out by the B.C.G. health visitors. As many as 40 children could be vaccinated in an afternoon by this method.

(c) The Environment

A bad district environment can be countered only by a radical improvement in the housing conditions of that district and by a general B.C.G. programme. Both these measures were receiving the attention of the Health Department at the end of the year in relation to the Docks area of Cardiff.

The Housing Department continued to allocate 10 per cent of all its new houses to tuberculous families so this made it possible to deal with unfavourable home conditions. It is remarkable how infrequently new cases of tuberculosis occur in the new housing estates in spite of the rehousing of tuberculous families in them.

There is much to be done in developing the preventative services as far as they are applied to the working environment of a newly diagnosed or a known case of tuberculosis. A more definite aggressive system will have to be developed which will protect the tuberculosis case from relapse and protect workmates from sources of infection.

A table showing some of the work done in 1956 with regard to the B.C.G. vaccination of child contacts of cases of tuberculosis is given below :—

Table I. B.C.G. VACCINATION WORK, 1950 TO 1956

	1950	1951	1952	1953	1954	1955	1956
Number of contacts attending clinics	—	—	754	1,334	1,021	1,174	1,287
Number of contacts given B.C.G. Vaccination	59	68	283	617	468	431	607
Number of contacts found Mantoux Positive	—	—	117	186	159	121	138
Number of contacts given annual skin tests after B.C.G. ..	43	43	109	315	481	615	145
Number of contacts re-vaccinated	—	10	18	45	19	11	10
Number of contacts admitted to Hostel and given B.C.G. ..	—	15	92	82	84	69	—
Number of others given B.C.G. (Nurses, Medical Students, etc.)	—	92	19	89	105	298	225
Number of contacts from outside Cardiff given B.C.G. ..	—	8	16	19	32	44	36
Number of home visits made by B.C.G. Health Visitors ..	—	—	617	825	764	693	1,082
Number of re-visits made by B.C.G. Health Visitors ..	—	—	293	667	871	932	1,001
Number of new born babies given B.C.G. at St. David's Hospital	—	—	76	90	127	130	118
SCHOOLS							
Number offered B.C.G. ..	—	—	—	406	5,010	4,746	2,910
Number tuberculin skin tested ..	—	—	—	364	4,147	3,643	2,247
Number found tuberculin negative ..	—	—	—	255	3,016	2,790	1,787
Number given B.C.G. ..	—	—	—	186	2,876	2,653	1,757

The decrease in the number of annual post B.C.G. tuberculin tests carried out was due to the fact that this test is now carried out biennially after B.C.G. vaccination.

II. Statistical Review for 1956

(a) Deaths

Deaths from both pulmonary and non-pulmonary tuberculosis were lower in 1956 than in any previous year. Tables II and III give an indication of the extent to which pulmonary tuberculosis had declined as a great killing disease.

Table II. Showing the Pulmonary Tuberculosis Fatality Rates in Cardiff for the last 8 years

	1949	1950	1951	1952	1953	1954	1955	1956
Number of deaths from pulmonary tuberculosis	155	112	105	80	72	75	46	36
Number of new notifications of pulmonary tuberculosis ..	376	304	324	284	329	258	222	294
Percentage :—								
Deaths, notifications	41	37	32	28	22	29	21	12

Table III

**Showing the decline in the Annual Death Rates from
Tuberculosis in Cardiff and in England and Wales during
the last 60 years**

Year	Number of Deaths from pulmonary tuberculosis in Cardiff	Death Rate per annum for 100,000 Population		
		Cardiff		England and Wales
		Pulmonary Tuberculosis	Non-pulmonary Tuberculosis	Pulmonary Tuberculosis
1894	227	152	96	138
1934	205	93	22	65
1944	144	67	12	52
1954	75	30	2	16
1955	46	18	1	13
1956	36	14	0·4	11

Twenty years ago there were 50 deaths annually in Cardiff from non-pulmonary tuberculosis whereas in 1956 there was only 1, a female over the age of 65 who died of genito-urinary tuberculosis. Tuberculosis has ceased to be a frequent cause of death among young adults. Indeed, over two-thirds of those who died of the disease in 1956 were over 55 years of age and only 2 were under 35.

Table IV

**Giving the Annual number of Deaths from
Pulmonary Tuberculosis in Age Groups**

Number of Deaths Annually from Pulmonary Tuberculosis				
Age Groups	1935	1945	1955	1956
0-14 ..	7	7	0	0
15-24 ..	55	31	1	0
25-34 ..	43	32	12	2
35-44 ..	49	37	4	4
45-54 ..	29	31	9	5
55-64 ..	25	25	8	16
65 and over ..	8	15	12	9
	279	241	46	36

Table V

**Giving the percentage of the total deaths from
Pulmonary Tuberculosis in age groups**

Percentage of Total Deaths per annum in each Age Group					
Age Groups	1935	1945	1954	1955	1956
0-34 ..	49	39	12	28	6
35-54 ..	36	38	38	28	25
55 and over ..	15	23	50	44	69

Table VI shows to what extent more males than females die of pulmonary tuberculosis.

Table VI Showing how many Males and Females die annually from Pulmonary Tuberculosis

	1935	1945	1954	1955	1956
Total number of deaths from Pulmonary Tuberculosis	216	178	75	46	36
Males do. do. ..	130	97	49	30	29
Females do. do. ..	86	81	26	16	7
Percentage Males total deaths	60	55	65	65	80

Table VII Giving Deaths from Pulmonary Tuberculosis in Cardiff during 1956 according to age and sex

Number of Deaths from Pulmonary Tuberculosis			
Age Groups	Males	Females	Total
Under 24 ..	—	—	—
25-34	1	1	2
35-44	3	1	4
45-54	3	2	5
55-64	14	2	16
65+	8	1	9

(b) Notifications

On 31st December, 1956, there were 2,653 cases of pulmonary tuberculosis and cases of non-pulmonary tuberculosis on our registers, representing over 1 per cent of the total population in Cardiff.

Table VIII Giving the number of cases of Tuberculosis on the Register in Cardiff on the 31st December, 1955 and 1956

	Pulmonary Tuberculosis			Non-Pulmonary Tuberculosis		
	Males	Females	Total	Males	Females	Total
Number of cases on the register 31/12/55 ..	1,409	1,195	2,604	187	243	430
Number removed during 1956 through deaths ..	48	9	57	2	1	3
Number of cases previously lost sight of but now known to be dead ..	8	7	15	—	—	—
Number removed during 1956 through leaving Cardiff to live elsewhere	58	51	109	2	5	7
Number removed during 1956 as "recovery" cases	47	48	95	17	32	49
Number of cases lost sight of	27	10	37	8	9	17
Number of newly notified cases during 1956 ..	175	119	294	18	13	31
Number of known cases who came from outside to live in Cardiff	34	34	68	3	4	7
Number of cases on the register 31/12/56 ..	1,430	1,223	2,653	179	213	392

There has been no significant decrease in the incidence of new cases of pulmonary tuberculosis during the last 20 years.

Table IX Giving the annual number of new notifications of
Pulmonary Tuberculosis in Cardiff

Year	1935	1936	1945	1946	1953	1954	1955	1956
Number of new notifications ..	289	305	345	417	329	258	222	294

Table X Giving the numbers of new cases of Tuberculosis
during 1956 by Age and Sex

NUMBER OF NEW CASES

Age Groups		Pulmonary Tuberculosis			Non-Pulmonary Tuberculosis		
		Males	Females	Total	Males	Females	Total
Under 1	..	—	—	—	—	—	—
1-4	..	10	5	15	3	1	4
5-9	..	7	12	17	2	—	2
10-14	..	3	2	5	1	2	3
15-19	..	16	18	34	2	1	3
20-24	..	33	27	60	3	6	9
25-34	..	29	39	68	3	4	7
35-44	..	37	24	61	1	1	2
45-54	..	31	14	45	2	2	4
55-64	..	31	9	40	3	—	3
65+	..	12	3	15	1	—	1
TOTAL	..	209	153	362	21	17	38

Table X includes those cases which are “new” only in so far as although they were known cases of tuberculosis, they moved from outside to live in Cardiff during 1956. The age and sex of these transferred cases are given in Table XI.

Table XI Giving the Age and Sex of Transfers into Cardiff
during 1956 and included in Table X

NUMBER OF CASES

Age Groups		Pulmonary Tuberculosis			Non-Pulmonary Tuberculosis		
		Males	Females	Total	Males	Females	Total
Under 1	..	—	—	—	—	—	—
1-4	..	—	1	1	—	—	—
5-9	..	—	2	2	—	—	—
10-14	..	—	—	—	—	—	—
15-19	..	2	1	3	—	—	—
20-24	..	16	9	25	—	1	1
25-34	..	6	11	17	1	3	4
35-44	..	8	8	16	1	—	1
45-54	..	—	1	1	—	—	—
55-64	..	1	1	2	—	—	—
65+	..	1	—	1	1	—	1
TOTAL	..	34	34	68	3	4	7

Six deaths from pulmonary tuberculosis and one from non-pulmonary tuberculosis which had not been notified prior to death, are not included in the tables above.

Pulmonary tuberculosis is commoner now in the older males than in any other section of the community. The average age of new notifications of male cases of pulmonary tuberculosis was 38 in 1956 as against 34 in 1954. The average age for females was 30 in 1956 as against 27 in 1954.

The sources of ascertainment of new cases of pulmonary tuberculosis during 1955 and 1956 are given in table XII.

Table XII

Sources of ascertainment of New Cases of Pulmonary Tuberculosis

Sources of Ascertainment	1955	1956
General Medical Practitioners ..	114	93
General Practitioners X-ray Sessions	35	93
Hospitals ..	43	39
Mass Radiography Service ..	10	34
National Service Recruits ..	2	3
H.M. Forces ..	2	1
Examination of Contacts ..	13	30
Ante-natal Clinic ..		1
TOTAL ..	222	294

Table XIII

New Cases of Non-Pulmonary Tuberculosis by Sex and Localisation of the Disease

Site of Infection	1935		1945		1955		1956	
	M	F	M	F	M	F	M	F
Nervous System ..	5	17	3	1	3	1	3	2
Intestines and Peritoneum ..	2	7	2	5	1	—	—	3
Vertebral Column ..	5	6	4	6	4	2	5	—
Bones and Joints ..	19	2	6	2	6	4	2	1
Cervical Glands	24	39	24	29	3	10	5	6
Kidneys ..					—	3	—	—
Other Organs ..					6	3	3	1

In addition there were 7 cases of non-pulmonary tuberculosis who moved from outside during 1956 to live in Cardiff.

VII—NATIONAL HEALTH SERVICE ACTS, 1946–1952

CARE OF MOTHERS AND YOUNG CHILDREN

Live-births and Still-births—Sources of Notification

The following statement shows the number of live-births and still-births notified as having occurred in Cardiff during 1956, according to the source of notification :—

<i>Notified by :—</i>	<i>Live-births</i>	<i>Still-births</i>	<i>Total</i>
Municipal Midwives	789	6	795
Midwives of the Cardiff District Nursing Association ..	1,105	14	1,119
Private Midwives (Domiciliary) ..	5	—	5
Private Midwives (Nursing Homes)	471	3	474
Parents	—	1	1
Maternity Hospitals :—			
(a) Cardiff Maternity Hospital	1,535	67	1,602
(b) St. David's Hospital ..	1,552	68	1,620
	<hr/> 5,457	<hr/> 159	<hr/> 5,616

Notifications in respect of children born to residents of other Authorities were as shown :—

<i>Notified by :—</i>	<i>Live-births</i>	<i>Still-births</i>	<i>Total</i>
Municipal Midwives	7	—	7
Midwives of the Cardiff District Nursing Association ..	8	—	8
Private Midwives (Domiciliary) ..	—	—	—
Private Midwives (Nursing Homes)	182	—	182
Parents	—	—	—
Maternity Hospitals :—			
(a) Cardiff Maternity Hospital	496	8	518
(b) St. David's Hospital ..	397	5	419
	<hr/> 1,090	<hr/> 13	<hr/> 1,134

Transferred notifications of Cardiff cases were 20. Thus, after allowing for all transferred notifications, the number of Cardiff births notified was 4,502 and this figure was made up as follows :—

	<i>Live-births</i>	<i>Still-births</i>	<i>Totals</i>
Domiciliary	1,886	21	1,907
Institutional	2,501	94	2,595
			<hr/> 4,502

Child Welfare and Ante-Natal Clinics

(a) Child Welfare Centres

The total number of sessions held at Child Welfare Centres was 1,364, the average attendance at each being 37, and the total number of attendances was 50,258. The number of children who first attended during the year who at their first attendance were under 1 year of age was 3,541. The total number of children who attended during the year was 6,772.

(b) Ante-Natal Clinics

The number of sessions held was 818, the average attendance at each session being 14. The total number of attendances was 11,146. The number of women who attended for the first time was 2,567 and the total number of women who attended during the year was 3,138.

The number of expectant mothers who attended the ante-natal clinics for the first time during the year is shown in relation to the number of notified births (live and still) belonging to Cardiff as follows :—

- (i) Total number of notified births belonging to Cardiff, 4,502.
- (ii) The number of expectant mothers who attended the ante-natal clinics for the first time, 2,567.
- (iii) Percentage of notified births represented by (ii), 57.02.

Blood testing for the Wassermann Reaction was continued. The number of specimens submitted was 2,183, of which 3 (or 0.14 per cent) were found positive.

(c) Special Clinic for Mothers and Young Children

The treatment of non-venereal conditions continued throughout the year, the conditions most commonly found being trichomonas vaginalis and monilia albicans. The figures are as follows :—

Syphilis	..	..	..	..	1
Gonorrhoea	..	..	..	..	—
Other Conditions requiring treatment	..				151
Conditions not requiring treatment	..				18
					<hr/>
					170
					<hr/>
Total Attendances	..				763

Deaths ascribed to Pregnancy or Childbirth

There were three deaths ascribed to pregnancy or childbirth in respect of women in the area. Two occurred in hospital and the other at home. The causes of death were :—

1. (a) Pulmonary embolism.
(b) Thrombosis of Inferior Vena Cava.
(c) Parturition.
2. Pulmonary embolism due to infusion of amniotic fluid into the uterine veins due to premature detachment of the placenta.
3. Haemorrhage due to ectopic pregnancy.

Infectious Diseases

The following cases were notified during the year :—

		<i>Domiciliary Confinements</i>	<i>Institutional Confinements</i>
Ophthalmia Neonatorum	..	4	3
Pemphigus Neonatorum	..	—	—
Puerperal Pyrexia	.. ..	11	163

Of the 3 ophthalmia neonatorum cases which occurred in hospital, 1 removed from the area. The remainder of these cases and the 4 domiciliary cases cleared up with no impairment of vision.

Birth Control

The number of cases referred to the Cardiff Mothers' Advisory Clinic on medical grounds, for advice as to further pregnancies, was 23.

Nose and Throat Defects

		<i>Children under School Age</i>
Number examined for the first time	..	309
Received operative treatment in hospital	..	95
Received other forms of treatment at clinic	..	30
Total attendances at clinic	.. ..	508

Visual Defects

Attended clinic for the first time	..	635
Examined for errors of refraction	.. ..	367*
Spectacles prescribed	.. ..	212*

* Including cases first examined in and carried over from 1955.

Maternity Outfits

Maternity outfits are made available in all cases of home confinements, where necessary. The number supplied during the year was 1,680.

Domestic Help

Notes on this service are included in the appropriate section of the report, but it is recorded here that the number of instances in which domestic help was provided for cases of confinement during the year was 152.

Care of Illegitimate Children

The admission to the Salvation Army Home (Northlands), of unmarried expectant mothers was arranged in 18 instances during 1956. The Authority accepted financial responsibility for 15 cases. Arrangements were also made for one case to be admitted to the Salvation Army Home at Bristol, payment being made in this case.

Care of Premature Infants

Special visits are made in the case of premature babies born at home, 1,811 such visits having been made during the year. The scheme for following-up the premature babies on discharge from hospital is described in the reports for 1949 (page 22), and 1953 (page 33).

Statistics relating to prematurity are shown in the following table, after correction for transfers :—

Number of Premature Live-births notified :—

(a) In hospital	..	..	..	180
(b) At home	..	..	..	134
(c) In private nursing homes			..	9
			TOTAL	323

Number of Premature Still-births Notified :—

(a) In hospital	..	..	..	52
(b) At home	..	..	..	10
(c) In private nursing homes			..	—
			TOTAL	62

Weight at birth	PREMATURE LIVE BIRTHS												PREMATURE STILL-BIRTHS		
	Born in hospital			Born at home and nursed entirely at home			Born at home and transferred to hospital on or before 28th day			Born in nursing home and nursed entirely there			Born in nursing home and transferred to hospital on or before 28th day		
	Total	Died within 24 hrs. of birth	Survived 28 days	Total	Died within 24 hrs. of birth	Survived 28 days	Total	Died within 24 hrs. of birth	Survived 28 days	Total	Died within 24 hrs. of birth	Survived 28 days	Total	Died within 24 hrs. of birth	Survived 28 days
3 lb. 4 oz. or less ..	26	11	11	1	1	—	10	5	1	—	—	—	1	—	—
Over 3 lb. 4 oz. up to and including 4 lb. 6 oz.	43	5	32	4	2	1	9	—	8	2	—	2	—	2	—
Over 4 lb. 6 oz. up to and including 4 lb. 15 oz.	37	1	35	13	1	12	5	—	3	—	—	—	—	4	—
Over 4 lb. 15 oz. up to and including 5 lb. 8 oz.	74	1	73	83	—	83	9	—	5	6	—	6	—	10	6
TOTALS ..	180	18	151	101	4	96	33	5	17	8	—	8	1	52	10

Maternity Homes

At 31st December, 9 Nursing Homes remained on the Register, 4 having accommodation for maternity cases. The number of beds provided for maternity cases was 32.

Other accommodation for maternity cases is provided in two local General Hospitals, viz., the Cardiff Maternity Hospital and St. David's Hospital. St. David's Hospital and Cardiff Maternity Hospital are approved for Part I of the Midwifery Training, and recognised also for the training in gas and air analgesia.

Nurseries and Child Minders' Regulation Act, 1948

Number of premises registered at 31st December, 1956	..	4
Number of children provided for	.. ..	111
Number of Registered Daily Minders at 31st December, 1956		2
Number of children provided for	.. ..	24

Home Visitation

A summary of the work carried out by Health Visitors is as follows:—

Births—First Visits	.. ..	4,117
Births and Infant Deaths—combined visits	..	37
Still-birth investigations	.. ..	90
Infant death investigations	.. ..	85

Re-visits (Routine):—

Under 1 year	.. ..	13,546
Over 1 year, but under 2 years	.. ..	8,730
Over 2 years, but under 5 years	.. ..	26,982
Ante-natal	.. .. { First visits	1,120
	.. .. { re-visits	338
Post-natal	.. .. { First visits	3,714
	.. .. { re-visits	1,191
Ophthalmia Neonatorum	.. .. { First visits	9
	.. .. { re-visits	33
Immunisation	.. .. { First visits	3,994
	.. .. { re-visits	1,314
Vaccination	.. .. { First visits	3,780
	.. .. { re-visits	977
B.C.G.	.. .. { First visits	1,082
	.. .. { re-visits	1,001
Whooping Cough	.. .. { First visits	2,758
	.. .. { re-visits	937
Cardiac visits	.. .. { First visits	128
	.. .. { re-visits	534
Premature infants	.. .. { First visits	187
	.. .. { re-visits	1,624
Nutritional	.. .. { First visits	162
	.. .. { re-visits	188
Paediatric	.. .. { First visits	784
	.. .. { re-visits	1,479
Diabetic	.. .. { First visits	117
	.. .. { re-visits	495
Gastric	.. .. { First visits	7
	.. .. { re-visits	6

Asthma	..	{ First visits	..	210
		{ re-visits	..	34
Special V.D.	..	{ First visits	..	19
		{ re-visits	..	32
Mental Deficiency	..	{ First visits	..	153
		{ re-visits	..	2,341
Mental Health	..	{ First visits	..	79
		{ re-visits	..	424
Geriatric	..	{ First visits	..	443
		{ re-visits	..	1,159
Home Help Cases	..		..	101
Problem Families	..	{ First visits	..	46
		{ re-visits	..	847
Clinic visits	..	..	..	927
Ineffectual visits	..	..	..	10,278
Other unclassified visits	..	..	..	4,748
				<hr/> 103,387 <hr/>

DENTAL TREATMENT, 1956

REPORT OF Mr. W. A. SUTHERLAND, L.D.S., R.C.S.

(Principal School Dental Officer)

The following is a record of all forms of dental treatment carried out during 1956 in connection with maternity and child welfare, i.e., expectant and nursing mothers and young children.

	Expectant Mothers	Nursing Mothers	Pre-School Children	Total
(a) <i>Numbers provided with dental care :</i>				
Referred for treatment by M.O's	755	701	1,046	2,502
Attended for inspection	551	562	987	2,100
Found to be in need of treatment	543	552	912	2,007
Treated for first time	416	440	772	1,628
Made dentally fit	250	455	682	1,387
Attendances for treatment	1,142	2,251	992	4,385
(b) <i>Treatment provided :</i>				
Teeth filled	239	518	108	865
Teeth extracted	1,053	1,803	1,449	4,305
Silver Nitrate treatment	5	7	8	20
Dressings	77	107	95	279
Scalings with gum treatment	100	149	6	255
Scalings	45	65	9	119
Extractions under local anaesthetic	89	170	7	266
Administrations of general anaesthetics	306	422	788	1,516
Crowns and Inlays	—	—	—	—
Mothers supplied with dentures	111	268	—	379
(c) <i>Dentures supplied :</i>				
Full upper	52	146	—	198
Partial upper	50	106	—	156
Full lower	31	91	—	122
Partial lower	22	70	—	92

Number of sessions—552.

Radiographs—24.

CARE OF MOTHERS AND YOUNG CHILDREN

DENTAL TREATMENT, 1956

Anaesthesia

In response to an invitation from the Medical Officer of Health, Professor W. Mushin of the Department of Anaesthetics of the Welsh National School of Medicine gave a most interesting and practical lecture on "Anaesthesia in Dental Surgery." His talk covered a wide field and the large attendance of medical and dental officers obtained the benefit of his expert knowledge and wide experience. Following a discussion on some of the problems experienced in-school and maternity and child welfare services, Professor Mushin readily agreed to hold a demonstration as soon as convenient, when he would enlarge on some of the points mentioned, with special reference to the use of Trilene and Vinesthene.

Fluoridation

Fluoridation of domestic water supplies is now in operation. Of the original four localities selected for this experiment, only three remain, Darlington having withdrawn from the scheme owing to "vigorous opposition from the townspeople."

Andover took the place vacated by Darlington, although there was some opposition here also.

This subject is still being hotly contested, the opposition being mainly on ethical grounds.

Many articles on fluoridation have appeared in medical and dental journals and the Ministry of Health have issued a reference note on the subject (No. 9), the summary of which reads:—

"The Government has every reason to believe that fluoridation is of great benefit in the preservation of the teeth of children and ultimately also of adults, against dental decay and that it reduces dental decay in children by about 60 per cent. There is no evidence that the consumption of water fluoridated to a level of about 1 part per million has any harmful effects on those who drink it. We are fortunate in having available not only the experience of some 10 years of fluoridation in America, but also that of the life long consumption of water containing fluoride naturally, both in America and in this country. While, therefore, all water supplies deficient in fluoride might justifiably be fluoridated at once, it is felt, that before this step is taken, there should be demonstrations in this country, not because it is thought there might be any harmful effects—there is already ample evidence that there are none—but to show the extent of the benefit that fluoridation can bring to this country and how best it can be applied to our circumstances. This should not be described as "mass medication." What is proposed is to make good a deficiency in those water supplies which lack this beneficial element and to proceed in a carefully-planned and scientific way so as to secure the best possible results in our country."

Fewer sessions were devoted to maternity and child welfare work this year as compared with 1955 (1955—592 sessions; 1956—552 sessions). Most of the treatment operations showed but little variation from those of 1955; there was, however, a noticeable fall in the number of mothers who were supplied with artificial dentures.

In 1955—439 patients were supplied with 649 dentures.

In 1956—379 patients were supplied with 568 dentures.

MIDWIFERY SERVICE

At the end of the year the midwives practising in the area were as shown :—

(a) Institutional

(i) Midwives employed by Hospital Management Committees or Boards of Governors under the National Health Service Act, 1946 ..	63
(ii) Midwives employed in Nursing Homes ..	7

(b) Domiciliary

(i) Midwives employed by the Authority ..	16
(ii) Midwives employed by voluntary organisations under arrangements with the Local Health Authority in pursuance of Section 23 of the National Health Service Act, 1946	6
(iii) Midwives in private practice	4

Deliveries attended by midwives during the year were as follows :—

	Domiciliary Cases					Cases in institutions
	Doctor not booked		Doctor booked		Totals	
	Doctor present at time of delivery of child	Doctor not present at time of delivery of child	Doctor present at time of delivery of child (either the booked Doctor or another)	Doctor not present at time of delivery of child		
(1)	(2)	(3)	(4)	(5)	(6)	(7)
(a) Midwives employed by the Authority	3	10	52	727	792	—
(b) Midwives employed by Voluntary Organisations :—						
(i) Under arrangements with the Local Health Authority in pursuance of Section 23 of the National Health Service Act, 1946	3	25	54	1,032	1,114	—
(ii) Otherwise (including Hospitals not transferred to the Minister under the National Health Service Act)	—	—	—	—	—	—
(c) Midwives employed by Hospital Management Committees or Boards of Governors under the National Health Service Act ..	—	—	—	—	—	3,160
(d) Midwives in Private Practice (including Midwives employed in Nursing Homes)	—	—	2	2	4	471
TOTALS ..	6	35	108	1,761	1,910	3,631

(This table relates to women delivered, not, in the case of multiple births, to infants)

Medical Aid under Section 14 (1) of the Midwives Act, 1951

The number of cases in which medical aid was summoned during the year under Section 14 (1) of the Midwives Act, 1951, by a midwife :—

(a) For Domiciliary cases

(i) Where the medical practitioner had arranged to provide the patient with maternity medical services under the National Health Service ..	2
---	---

(ii) Others	12
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(b) For cases in Institutions	—
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Administration of Gas and Air Analgesia by Domiciliary Midwives

This section of the report relates only to those midwives employed directly by the Local Health Authority (referred to as municipal midwives), and those midwives employed in the public midwifery service under Section 23 by voluntary organisations as agents of the Local Health Authority (referred to as midwives of the Cardiff District Nursing Association).

(a) *Midwives qualified to administer analgesia*

At 31st December, 1956, all municipal midwives were qualified in the administration of gas and air analgesia, and the six practising midwives of the Cardiff District Nursing Association were similarly qualified.

(b) *Possession of apparatus*

At the end of 1956 the municipal midwives possessed sixteen sets of the necessary apparatus for the administration of analgesia, and eight sets of apparatus were available for the use of the midwives of the Cardiff District Nursing Association.

(c) *Administration during the year*

The total administrations, total confinements and resulting percentages of administrations to confinements were as follows :—

	<i>Total Administrations</i>	<i>Total Confinements</i>	<i>Percentage</i>
Municipal Midwives	547	795	68·8
Midwives of the Cardiff District Nursing Association	804	1,119	71·8
Combined Total	<u>1,351</u>	<u>1,914</u>	<u>70·6</u>

(d) Development of gas and air analgesia

It will be seen from the following table that for the first time since 1947, a decrease was shown in the use of inhalational analgesia.

<i>Year</i>		<i>Total Administrations</i>	<i>Total Confinements</i>	<i>Percentage</i>
1947*	..	395	2,197	13.43
1948	..	1,085	2,113	51.35
1949	..	1,294	2,111	61.29
1950	..	1,314	1,996	65.83
1951	..	1,324	1,903	69.57
1952	..	1,404	1,951	71.96
1953	..	1,449	1,986	72.96
1954	..	1,628	2,148	75.79
1955	..	1,424	1,878	75.83
1956	..	1,351	1,914	70.59

* Commenced in June.

Institutional Midwives qualified to administer gas and air analgesia

The number of institutional midwives in practice at the end of the year qualified to administer inhalational analgesia in accordance with the requirements of the Central Midwives' Board :—

(a) Employed in hospitals in the National Health Service ..	..	63
(b) Employed in private nursing homes ..	..	4

Pethidine

The number of cases in which pethidine was administered by midwives in domiciliary practice during the year, was as follows :—

		<i>When doctor was not present at time of delivery of child</i>	<i>When doctor was present at time of delivery of child</i>	<i>Total</i>
Municipal Midwives ..		390	32	422
Midwives of the Cardiff District				
Nursing Association ..		331	25	356
TOTAL ..		721	57	778

Transport

At the end of the year motor car allowances were being paid to 11 midwives using their cars in connection with the service.

Supervision

Officers of the Department made 163 visits of inspection of midwives.

HEALTH VISITING

At the end of the year the staff consisted of the Superintendent, Deputy Superintendent, and 52 Health Visitors. Forty-three Health Visitors were engaged on the full range of duties which include general health visiting, school nursing, tuberculosis visiting, mental deficiency visiting and care of the aged. The remainder were undertaking particular duties which had been assigned to them and which include the hospital follow-up schemes, care of premature infants, liaison with the Chest Clinic, B.C.G. vaccination, immunisation and mental health work.

HOME NURSING

The Home Nursing Service is conducted on behalf of the authority by the Cardiff District Nursing Association through a scheme of full co-operation. The scheme is under the general direction of the Executive Committee of the Association upon which the local Health Authority is represented by five members of the Health Committee, and by the Medical Officer of Health who is also in control of the service, by virtue of his position.

The Association functions as an independent Body, still retaining its identity as a voluntary organisation and the scheme of co-operation includes also participation in the authority's domiciliary midwifery service. Financial control is ensured by the authority having a predominance of members on the Association's Finance Committee and because virtually all financial aspects of the two services provided by the Association stand referred to the appropriate controlling committee or sub-committee of the authority. For example, new proposals, etc., involving additional expenditure are "vetted" by the City Council's Finance Committee, salaries matters by the Establishment Committee, and supplies, etc., are purchased by the Central Contracts Committee; in fact, for all practical purposes, the Scheme functions just like any other section of the local health authority service.

Staff

The day-to-day administration of the service is in the hands of the Superintendent and she has with her two assistant Superintendents.

At the end of 1956 the nursing staff consisted of 27 whole-time State Registered Nurses (including one male) and four half-time, making a total equivalent of 29. In addition, there were four student Home Nurses (equivalent to three whole-time Nurses). During the year five students successfully completed training.

Transport of the nurses is normally by cycle, motorised cycle, auto-cycle, or motor car, the authority bearing the cost in the usual accepted ways, viz., fixed allowances for the use of pedal cycles and mileage allowances in respect of the other vehicles where privately owned. Actually only four cars are privately owned, the authority owning others which are used exclusively for the Service.

Nurses are trained in driving by members of the ambulance service staff. After very careful consideration, and with the co-operation of the Local Safety Officer, it has recently been decided that the most suitable vehicle for use by the District Nurses (apart from the motor-car, of course) is the light, 70 c.c. scooter, and these are now provided by the authority. Efficient transport facilities are essential in the service, especially for dealing with those cases requiring more than one visit in the day. No scheme has yet been made for a night service, but in extremely needy cases arrangements are made for late visits up to 10.0 p.m.

Whereas it has been the rule for many years for district nurses to be resident in premises centrally situated (and under the supervision of the resident Superintendent), it is now almost an entirely non-resident staff, the accommodation formerly used for the purpose now being used for offices on terms agreed between the Association and the authority. With the co-operation of the Cardiff Corporation Housing and Estates Committee, a house for use of the district nurse has been set aside on one of the largest housing estates (Ely) and it is intended to make the same provision on other large estates.

Two members of the staff were unable to handle streptomycin because of marked reactions when in contact with this form of treatment.

No difficulties are experienced in the recruitment of staff and the need to advertise seldom arises. Many nurses come to the service after completing their midwifery training and many stay on longer than the usual additional year.

At times of heavy demand on the service, during epidemics or shortage in staff, every effort is made to continue visits to the acutely ill patients, to people living alone, the aged and to children. Visits are reduced for weekly bathing or any other conditions where no ill effect would follow. Most families are very co-operative at these times and much valuable assistance is given by the medical practitioners by giving some of the injections themselves.

A summary of the work carried out during 1956 is as follows :—

Number of new cases admitted for treatment	..	4,327
Number of cases carried over from 1955	..	808
Total number of cases attended	..	5,135
Number of attendances (visits) during the year	..	133,123

Classification of Cases and Visits

	<i>Cases</i>	<i>Visits</i>
Medical	4,088	94,779
Surgical	681	18,121
Infectious Diseases	3	20
Tuberculosis	358	20,117
Maternal Complications	2	56
Others	3	30

Sources from which Cases were Referred

General Practitioners	.. .. .	4,117
Hospital	.. .. .	81
Public Health Department—School Health Service	.. .. .	} 26
Maternal & Child Welfare	.. .. .
Miscellaneous	.. .. .	103

Analysis of Diseases and Disorders Requiring Treatment or Attention

Disease or Condition	Cases	Visits
Cancer	251	7,935
Heart and Circulatory	427	15,515
Respiratory (including pneumonia, asthma, and bronchitis)	181	2,101
Diabetes	121	23,710
Tuberculosis—General	17	823
Streptomycin	1,059	19,994
Eye Diseases	4	203
Rheumatism	3	135
Rheumatoid Arthritis	50	3,693
Infectious Diseases	3	20
Children	399	2,114
Maternity Cases	2	56
Senility	197	8,595
Cerebral Haemorrhage	154	7,280
Anaemia	247	9,207
Gynaecological	121	720
Other diseases, including :—		
Parkinsonism	9	382
Arterio and disseminated Sclerosis	5	222
Fractures	27	1,258
Enemas and Rectal washouts (these given for constipation and prior to X-ray examination)	34	706
Spastics	4	656
Other injections (Testosterone, Bismuth, Bismostab, etc.)	17	387

It is shown here that the greatest call upon the service during the year was for the administration of drugs by injection in the treatment of diabetics receiving insulin, tuberculosis patients receiving streptomycin and heart cases receiving cardiac drugs. The average number of visits in these cases was 37, but this does not necessarily show the types of illness upon which the nurses have to devote most time. It is difficult to assess this in any case because even under good circumstances, where adequate help is available in a home, an intra-muscular injection might take 15 to 20 minutes, whereas a patient requiring complete general nursing would take the nurse from 30 to 40 minutes. The time spent by the staff on any visit depends, of course, on many factors, e.g., the type of illness, the circumstances surrounding the patient in the home, the facilities for home nursing, the help available from relatives or friends (which can save a good deal of valuable time) and adequate supplies of linen, water, etc.

AMBULANCE SERVICE

Analysis of Journeys, 1st January—31st December, 1956

(a) Patient-Carrying :

			<i>Journeys</i>	<i>Patients</i>	<i>Mileage</i>
Emergency	..	..	2,119	2,184	15,876
Accident	..	..	1,350	1,519	6,911
Outpatients	..	..	13,672	38,772	104,250
Others	..	..	11,841	14,879	96,073

(b) Occupation and Training Centre :

..	345	2,693	3,504
	29,327	60,047	226,614

(c) Abortive and service journeys

1,000	5,300
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(d) Transporting of Midwives, apparatus, etc. ..

2,202	28,626
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TOTALS	32,529	60,047	260,540
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Totals for the year 1955 ..	(33,103)	(62,084)	(275,329)
Stretcher cases included in above ..		15,031	85,885
Sitting cases included in above		45,016	140,729
		60,047	226,614

Average mileage per journey	8.01
Average mileage per patient	4.34

PREVENTION OF ILLNESS, CARE AND AFTER-CARE

Cardiac After-Care and Follow-up.—Dr. Arthur J. Thomas, Consultant Physician, under whose supervision the scheme remains, has again expressed his great appreciation of the work of the health visitor engaged in the scheme. He says "... as each year goes by, the work becomes more and more important and by virtue of the experience gained the work becomes of greater value." Dr. Thomas refers to his survey of the dietary habits of coronary artery disease patients mentioned in last year's report, and says that this work is still going on.

The follow-up of mitral valvotomy cases has now been consolidated into a review of the improvement or otherwise of the cases as estimated by the health visitor (Miss Clarice Wilcox) who has contributed the following notes on this aspect of the scheme :—

THE RESULTS OF MITRAL VALVOTOMY

(a Cardiac After-care Study)

by

Miss Clarice Wilcox, S.R.N., S.C.M., R.F.N., H.V.

Cardiac after-care in the City of Cardiff became fully established in January, 1954, with the whole-time service of a Health Visitor under the direction of a Cardiologist. It covers all categories of heart disease but emphasis is laid on the after-care of certain groups of cases.

- (1) **The patient discharged from hospital.** The Health Visitor establishes a relationship with the patient in hospital and obtains knowledge of his medical history and treatment.
- (2) **The expectant mother with a cardiac lesion.** Here, as with other female cases, observation of the patient's condition, home responsibilities and her ability to carry them out, are fully assessed. General ante-natal care is also discussed.
- (3) **The follow-up of children.** Children who, during school life, were under the care of the School Health Service for rheumatic heart disease.
- (4) **The Collection of special information on social and nutritional states.**

Generally, the patients are visited in their homes on three or more occasions, according to the patients' ability to assimilate the advice given, and also to deal with any problems found. With reference to Group 2, these cases are kept under supervision during the pregnancy and afterwards are generally passed over to the area Health Visitor who sees the mother quite frequently in the course of her maternity and child welfare work.

Special emphasis on any particular group is given under the direction of the Cardiologist, but post-operative cases, those with an inconstant social background, and others who in the terminal stage of their illness need more supervision for their physical and mental well-being, are followed up more closely.

Briefly, the Health Visitor's duties to her patients are consideration of their physical, emotional and social states as applied to the preventive, curative and rehabilitation aspects of after-care.

MITRAL STENOSIS

During the course of this after-care work it has been possible to make an assessment of the effect of Mitral Valvotomy on certain cases of Mitral Stenosis, viewed particularly in relation to their exercise tolerance at home. The clinical assessment of the results of Mitral Valvotomy is based largely on the improvement in the symptoms of dyspnoea and tiredness, or in the increased effort tolerance assessed objectively. There may be a change in the physical signs of the Mitral Stenosis but frequently the classical physical signs are still present in the face of subjective improvement.

It therefore, seemed worthwhile to have a trained observer, who had followed the course of the cases from the pre-operative phase on through the follow-up period, assess the improvement in effort tolerance by questioning and observation in the patient's own home surroundings. It was felt that this would give a truer picture than the occasional questioning in a follow-up clinic.

Material.—Thirty cases were studied. The cases were those who lived within the City, so that a visit to the patient's home could be made to assess fully the home background, and the extent of home responsibilities. Twenty cases had been followed previously in some detail. Four of the thirty were male. All the cases had been operated upon by the same Thoracic Surgeon. The majority (23) were in their third or fourth decade, whilst the youngest was 15 and the oldest 53 years. The follow-up covered the period January, 1954, to April 1957, and no case had less than a six-month follow-up period.

Group I

This consists of ten cases that were a marked success. They experienced an increase in effort tolerance, had an improved general standard of health and were free of symptoms of Mitral Stenosis.

One woman with a previous history of psychoneurosis had not experienced any discomfort for the past twelve months, and the duration of the follow-up period was four years.

Two cases were unfortunate in developing throat or kidney infections, but in spite of these episodes their standard of health had been maintained.

One case in this group had a mediastinal tumour removed at the same time as the Mitral Valvotomy, and later received a course of radio-therapy. She has remained well since and has had a full term pregnancy.

There is no doubt that the results of Mitral Valvotomy in these ten cases was excellent and has remained good.

Group II (partially successful)

Thirteen cases were classified in this category. At operation, nine of these had only fairly satisfactory operative results, but four had good results. Two with good operative results have since experienced a decrease in effort tolerance. In one woman of 34 years a Valvotomy performed four years ago had up till twelve months before this review been successful but, during the last twelve months, she experienced a cerebral embolism (with good recovery), and also had attacks of chest infection. On clinical examination it seemed that the mitral valve was again becoming stenosed. The second case was a woman of 53 years, considered a successful case for twenty-one months, but in the past three months having an increase in dyspnoea. A third case with a successful result at operation was a young woman of 25 years who was symptom free until eighteen months afterwards when she had a cerebral embolism. The fourth case with a good result at operation was a woman of 53 years who was quite well for six months after operation but then developed attacks of asthma. Home conditions here showed an unhappy marital relationship which might well explain the deterioration.

Of the nine cases who were partially successful at operation, all experienced an increase in effort tolerance, but four have already shown some recession within twenty-two to thirty-six months. Three of these had other features such as cardiac enlargement and difficult home circumstances to explain the deterioration. Two were male patients who found after rehabilitation that their work was too heavy. The third was a woman of 46 years who nursed a sick husband in the terminal phase of his illness.

The fourth case showing deterioration was 43 years old and improved in the first six months, but her condition has fluctuated since with the occurrence of chest infections and after two and a half years the cardiac reserve has diminished and she has required mercurial diuretic therapy.

Group III (non-successful)

A total of seven cases have received no benefit. Of these only one was classified as a good result at operation. This case, a female of 36 years, had a deep vein thrombosis after operation, followed by a series of infections. She has not recovered good health. The remainder were considered to be somewhat improved after operation, and have been able to withstand various illnesses and operative procedures.

One patient had a staphylococcal bacteraemia. Two cases with hemiplegia before operation have received no benefit in any way.

It is generally understood that early valvotomies were technically less complete than more recent ones, but of five cases with a four year follow-up period, three have remained well and only one now has a tight stenosis of the mitral valve.

It should, therefore, be of interest to compare all cases after completing an equal follow-up period. In the course of investigations it was found that the majority had satisfactory home conditions and co-operative relatives; whilst home-helps met the need of those who had required extra help. Rehousing was necessary in only one case.

On the whole, female patients were quite sensible about the management of home duties; and generally it took between three to six months after operation before a patient undertook full home responsibilities.

Summary

Of the thirty cases reviewed, one third were considered markedly improved, thirteen partially improved, while the remainder showed no benefit. The three groups included valvotomies performed six months to five years ago, those of eighteen to thirty months duration provided the greater number of cases.

The first group contained all good technical results, those of the second and third were varied.

Investigations revealed that to mitigate stenosis of the mitral valve did not exclude the occurrence of complications, for example a cerebral embolism in a young woman in regular rhythm.

To accept mitral stenosis as a purely functional problem was incorrect, much depended on the cardiac state, any residual lung disease and the occurrence of cerebral lesions.

All twenty-three cases who have received some benefit from Valvotomy show an increase of some degree in effort tolerance.

I am indebted to Dr. Arthur J. Thomas, Cardiologist, for help and guidance, and to Mr. D. M. E. Thomas for access to his operation records.

Summary of Cases and Visits during 1956

<i>Type of Case</i>	<i>Cases Visited</i>	<i>New Cases</i>	<i>Number of Visits during the Year</i>
Rheumatic Heart Disease	55	10	123
After school follow-up Cases	27	8	40
Valvotomies	19	5	53
Murmurs of Pregnancy	47	26	88
Pulmonary and R.T. Heart Disease	10	9	23
Hypertension	45	21	79
Coronary Artery Disease	46	32	80
Specific Lesions	4	2	6
Emphysema	13	4	19
Congenital Lesions	12	5	14

The number of cases visited during 1956 is less than in the previous year because, even in 1955 we began to plan the visits on a more selective basis, whereby the routine follow-up visits were reduced in order to increase those considered to be more necessary. Actually, the number of "new case" visits was greater in 1956 than in 1955 although the total number of visits was considerably less.

Handicapped Persons.—The welfare authority is in the process of compiling a register of all handicapped persons living in the area and much useful information will thus be made available.

In the meantime, assistance to known paraplegic patients continues by way of special beds with lifting gear, replacement of steps by ramps and other structural alterations necessary in the patients' homes. In cases where considerable alterations are required for a patient renting a privately-owned house, the co-operation of the City Estates Committee is sought (and invariably secured) in making available a Council-owned house of suitable design and situation. The co-operation of the patient is also obtained and a transfer of houses arranged. This avoids the complications that could arise by the authority carrying out such alterations on privately-owned property—even with the owners' permission.

DOMESTIC HELP SERVICE

Details of the service provided during the year are as follows :—

Number of Home Helps employed at the end of the year :—

Whole-time	..	..	..	24
Half-time	..	..	..	9
Casual	..	..	..	102
				<hr/> 135 <hr/>

Cases in which help was provided :

Maternity	..	..	..	152
Tuberculosis	..	..	..	47
Chronic Sick	..	..	..	110
Aged and Infirm	..	..	..	455
Mental	..	..	..	3
Blind	..	..	..	28
Acute Sick	..	..	..	1
Miscellaneous	..	..	..	165
				<hr/> 961 <hr/>

Charges—cases in which :

Whole fee charged	..	..	22
Part fee charged	..	..	936
Service provided free	..	..	3

MENTAL HEALTH SERVICE

During the year, the Local Health Authority submitted to the Welsh Board of Health an amendment to their original proposals under the National Health Service Act, 1946, in respect of the establishment of a second Occupation Centre at "Preswylfa," Clive Road, Cardiff. Approval was given and the Centre was opened in June, 1956. This was the only major development in the Mental Health Service which was described in detail in the 1955 Report.

Mental Illness

Table I gives details of the cases dealt with by the Duly Authorised Officers, and it will be observed that 623 cases were dealt with in 1956. This compared with 599 during 1955, an increase of 23.

The care and after-care of the mentally ill remained under the direction of the physician-superintendent of Whitechurch Hospital, and the hospital staff and the staff of the Local Health Authority continued to work in close liaison in providing this service.

Accommodation for senile dementia cases continued to be a most serious problem, and was made more acute by the increasing shortage of beds for geriatrics, which resulted in many old people being referred to the Duly Authorised Officers by general practitioners because there were no vacancies in geriatric wards. Whitechurch Hospital does not take senile dementia cases as a normal practice and Ely Hospital is still overcrowded and unable to meet all our demands for these cases. This has resulted in a bottle-neck in the observation wards at St. David's Hospital, and the position has been further aggravated by the extension of the catchment area for which that hospital caters.

It is appreciated that the shortage of beds for geriatric and senile dementia cases is not peculiar to Cardiff, but this does not relieve the hospital authorities of their responsibilities, and serious consideration should be given to the question of allocating beds in other hospitals without further delay as the position is steadily worsening and will not be solved by waiting.

Mental Defectiveness

Statistical tables, including those conforming to the requirements of the Ministry of Health, are submitted.

On reference to Table IV it will be noted that the total number of ascertained cases of mental defect at the end of 1956 was 1,043, as compared with 1,050 at the end of 1955.

It would be incorrect to presume from these figures that mental deficiency is on the decrease. Unfortunately, the position is unaltered as will be observed on reference to Table VIII. The reason for the decrease in 1956 is due solely to the fact that as a result of a survey of adult male defectives under supervision it was decided to remove 39 names from the Statutory Supervision list.

As with senile dementia cases, the shortage of beds in Mental Deficiency Hospitals is very serious. This has resulted in considerable hardship to parents and relatives, and our waiting list for beds shows no sign of shortening. The urgent waiting list at the end of the year was 9, as compared with 11 at the end of 1955, but on reference to Table X it will be observed that the total number of cases in hospital at the end of the year was 309, as compared with 321 at the end of 1955, and it must be realised that Cardiff fared badly in the allocation of the beds which became available. If Cardiff had maintained their 1955 quota of beds there would have been no waiting list at the end of 1956.

With the opening of the new Occupation Centre at "Preswylfa," it was possible to improve the grouping of patients and also to cater for some patients from Glamorgan County. Table V shows the number of cases on the registers of the Centre at the end of the year. There is still a need for additional classrooms at both Centres and it is hoped to provide these in 1957.

TABLE I

Lunacy and Mental Treatment Acts. Work of the Duly Authorised Officers.

	Male	Female	Total
(1) Number of Cases dealt with during 1956	242	381	623
The Cases were dealt with as follows :—			
(i) Admitted to Mental Hospitals :			
(a) Whitchurch Hospital—			
Certified	4	1	5
Voluntary	105	202	307
Temporary	6	9	15
Neurosis Unit	6	—	6
(b) Ely Hospital—			
Certified	3	15	18
Voluntary	8	49	57
(c) Other Hospitals—			
Certified	1	1	2
Voluntary	4	5	9
Temporary	—	—	—
(ii) Transferred to St. David's Hospital (Sick Wards) ..	54	39	93
(iii) Admitted direct to St. David's Hospital (Sick Wards) ..	4	6	10
(iv) Discharged home or to Welfare Authorities	36	45	81
(v) Placed in care of Police, Military Authorities, etc. ..	3	1	4
(vi) Died before certification	—	—	—
(vii) Other discharges	—	1	1
(viii) Absentees returned direct to Whitchurch Hospital ..	7	5	12
(ix) Absentees returned direct to other Hospitals	—	—	—
(x) Transferred to Sick Wards, other Hospitals	—	—	—
(xi) Cases still under observation	1	1	2
(xii) Absconded cases returned to Mental Hospitals	—	1	1
	242	381	623
(2) Number of Cases seen by Psychiatrist in St. David's Hospital Sick Wards during 1956 :			
No action taken	30	28	58

TABLE II

Mental Deficiency Acts. Particulars of Cases reported during 1956.

	Under 16 yrs.			Over 16 yrs.			Total		
	M.	F.	T.	M.	F.	T.	M.	F.	T.
1. PARTICULARS OF CASES REPORTED DURING 1956 :—									
(a) Cases ascertained to be defectives "subject to be dealt with." Action taken on reports by :—									
(i) Local Education Authorities on children									
(1) While at school or liable to attend school	2	12	14	—	—	—	2	12	14
(2) On leaving Special Schools	7	10	17	—	—	—	7	10	17
(3) On leaving Ordinary Schools	—	1	1	—	—	—	—	1	1
(ii) Police or by Courts	—	—	—	1	—	1	1	—	1
(iii) Other Sources	—	—	—	1	1	2	1	1	2
TOTAL of 1 (a)	9	23	32	2	1	3	11	24	35
(b) Cases reported who were found to be defectives but were not regarded as "subject to be dealt with" on any ground	10	6	16	3	4	7	13	10	23
(c) Cases reported who were not regarded as defectives and are thus excluded from (a) or (b)	11	8	19	1	2	3	12	10	22
(d) Cases reported in which action was incomplete at 31st December, 1956, and are thus excluded from (a) or (b)	5	11	16	—	—	—	5	11	16
Total of 1(a)–(d) inc.	35	48	83	6	7	13	41	55	96
2. DISPOSAL OF CASES REPORTED DURING 1956 :—									
(a) Of the cases ascertained to be defective "subject to be dealt with," number :—									
(i) Placed under Statutory Supervision	9	22	31	1	—	1	10	22	32
(ii) Placed under Guardianship	—	—	—	—	—	—	—	—	—
(iii) Taken to "places of safety"	—	1	1	—	—	—	—	1	1
(iv) Admitted to Institutions	—	—	—	1	—	1	1	—	1
(v) Action not yet taken	5	11	16	—	—	—	5	11	16
(vi) Left Cardiff	—	—	—	—	1	1	—	1	1
(b) Of the cases not ascertained to be defectives "subject to be dealt with," number :—									
(i) Placed under voluntary supervision	10	6	16	3	4	7	13	10	23
(ii) Action unnecessary	11	8	19	1	2	3	12	10	22
TOTAL of Item 2	35	48	83	6	7	13	41	55	96

In addition, 1 female under 16 reported under (a) (i) (ii) left Cardiff during the year.

TABLE III

Number of Mental Defectives for whom care was arranged by the Local Health Authority under Circular 5/52 during 1956, and admitted to :—

	Under 16 yrs.			Over 16 yrs.			Total		
	M.	F.	T.	M.	F.	T.	M.	F.	T.
(a) National Health Service Hospitals	—	2	2	2	2	4	2	4	6
(b) Elsewhere*	—	—	—	—	—	—	—	—	—
TOTAL	—	2	2	2	2	4	2	4	6

* The Cardiff Branch of the National Society for Mentally Handicapped Children provided care for 10 patients at the Preswylfa Occupation Centre in Cardiff during August, 1956.

TABLE IV

Mental Deficiency Acts. Statistical Return.

Total cases on registers at 31st December, 1956—

	Under 16 yrs.			Over 16 yrs.			Total		
	M.	F.	T.	M.	F.	T.	M.	F.	T.
(a) Cases "Subject to be dealt with" :—									
(i) Under Statutory Supervision	46	52	98	213	207	420	259	259	518
(ii) Under Guardianship	—	—	—	1	5	6	1	5	6
(iii) In "Places of Safety"	—	1	1	—	—	—	—	1	1
(iv) In Certified Institutions	29	14	43	140	115	255	169	129	298
(v) In State Institutions	—	—	—	7	3	10	7	3	10
(vi) On Licence from Institutions	1	—	1	7	5	12	8	5	13
(vii) Absconded from Institutions	—	—	—	—	1	1	—	1	1
(viii) Action not yet taken	5	11	16	—	—	—	5	11	16
(b) Cases not at present "Subject to be dealt with" :—									
(i) Under Voluntary Supervision	15	7	22	72	86	158	87	93	180
(ii) Action not yet taken	—	—	—	—	—	—	—	—	—
TOTAL	96	85	181	440	422	862	536	507	1043

TABLE V

Mental Deficiency Acts. Number of Cases receiving training at the Nursery, Occupation and Training Centres, on 31st December, 1956.

	Under 16 yrs.			Over 16 yrs.			Total		
	M.	F.	T.	M.	F.	T.	M.	F.	T.
(A) PENGAM ROAD CENTRE									
(a) Nursery (Class A) Under Supervision ..	6	7	13	—	—	—	6	7	13
From Other Authorities ..	1	—	1	—	—	—	1	—	1
(b) Nursery (Class B) Under Supervision ..	5	8	13	—	—	—	5	8	13
From Other Authorities ..	1	—	1	—	—	—	1	—	1
(c) Occupation Centre Under Supervision ..	3	1	4	5	7	12	8	8	16
From Other Authorities ..	1	—	1	1	2	3	2	2	4
(d) Training Centre Under Supervision ..	1	3	4	26	15	41	27	18	45
From Other Authorities ..	—	—	—	10	7	17	10	7	17
TOTAL	18	19	37	42	31	73	60	50	110
(B) "PRESWYLFA," CLIVE ROAD CENTRE									
(a) Nursery (Class A) Under Supervision ..	9	6	15	—	—	—	9	6	15
From Other Authorities ..	1	1	2	—	—	—	1	1	2
(b) Nursery (Class B) Under Supervision ..	9	6	15	—	—	—	9	6	15
From Other Authorities ..	4	2	6	—	—	—	4	2	6
(c) Occupation Centre Under Supervision ..	13	7	20	—	—	—	13	7	20
From Other Authorities ..	2	5	7	—	—	—	2	5	7
TOTAL	38	27	65	—	—	—	38	27	65
TOTAL (A) & (B)	56	46	102	42	31	73	98	77	175

TABLE VI

Classification of Mental Defectives in the Community on 31st December, 1956
(according to need on that date).

	Under 16 yrs.			Over 16 yrs.			Total		
	M.	F.	T.	M.	F.	T.	M.	F.	T.
(a) Cases included in Table IV (i)-(iii) in need of Hospital care and reported accordingly to the Hospital Authority :—									
(1) In urgent need of Hospital care :—									
(i) "Cot and Chair" cases	2	2	4	—	—	—	2	2	4
(ii) Ambulant low grade cases	1	—	1	2	1	3	3	1	4
(iii) Medium grade cases	—	—	—	—	—	—	—	—	—
(iv) High grade cases	—	1	1	—	—	—	—	1	1
TOTAL Urgent Cases	3	3	6	2	1	3	5	4	9
(2) Not in urgent need of Hospital care :—									
(i) "Cot and Chair" cases	—	—	—	—	—	—	—	—	—
(ii) Ambulant low grade cases	5	—	5	1	—	1	6	—	6
(iii) Medium grade cases	—	1	1	—	—	—	—	1	1
(iv) High grade cases	—	—	—	—	2	2	—	2	2
TOTAL Non-urgent cases	5	1	6	1	2	3	6	3	9
TOTAL ..	8	4	12	3	3	6	11	7	18
(b) Of the cases included in Table IV (a), (i), (ii) (vi) and (b) (i) number considered suitable for :—									
(i) Nursery and Occupation Centre ..	55	47	102	10	16	26	65	63	128
(ii) Training Centre	—	—	—	37	30	67	37	30	67
(iii) Home Training	—	—	—	—	—	—	—	—	—
TOTAL ..	55	47	102	47	46	93	102	93	195
(c) Of the cases included in (b), number receiving training :—									
(i) In Nursery and Occupation Centre ..	45	35	80	5	7	12	50	42	92
(ii) In Training Centre	1	3	4	26	15	41	27	18	45
(iii) At Home	—	—	—	—	—	—	—	—	—
TOTAL ..	46	38	84	31	22	53	77	60	137

TABLE VII

Age and classification of Cases reported during 1956

Age	Idiots		Imbeciles		Feeble-minded		Moral Defectives		Classification Deferred		Not Mentally Defective		Total
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
Under 1									1	1			2
1									2	1			3
2	1	1	2	2							1	2	9
3	2	1		3					3				9
4		1		2					2	1	5	4	15
5				1						1	1	1	4
6				1	1					1			3
7						2							2
8						1							1
9						2							2
13					1						1		2
15					8	19			1		2	1	31
16					1	1							2
18						1					1		2
Over 21			1		3	3						2	9
TOTAL ..	3	3	3	9	14	29	—	—	9	4	12	10	96

TABLE VIII

Classification of Cases reported during 1947-1956

Classification	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	TOTAL
Idiots ..	6	15	1	3	2	7	3	1	3	6	47
Imbeciles ..	18	12	8	5	11	8	11	13	8	12	107
Feeble-minded ..	23	32	41	34	31	34	35	53	42	43	367
Moral Defectives ..	—	—	—	—	—	—	—	—	—	—	—
Classification Deferred ..	1	—	7	17	3	3	3	3	2	13	52
Not Mentally Defective ..	48	59	57	59	47	52	52	70	55	74	573
	6	6	7	8	13	8	17	5	10	22	102
TOTAL ..	54	65	64	67	60	60	69	75	65	96	675

TABLE IX

Summary of ascertained Cases

	Position at 31st December 1955	Additions during 1956	Deletions during 1956	Position at 31st December 1956
Under Statutory Supervision ..	543	32	57	518
Under Guardianship	5	2	1	6
In Places of Safety	2	8	9	1
In Hospitals and on Licence ..	333	10	21	322
"Subject to be dealt with" Action not yet taken	—	—	—	16
Under Voluntary Supervision ..	167	36	23	180
TOTAL ..	1,050	88	111	1,043

TABLE X

Classification and Summary of Cases under Order 1947-1956

	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956
Idiots	21	27	26	25	26	28	27	26	25	27
Imbeciles	96	95	98	95	95	93	90	91	98	98
Feebleminded	178	188	192	189	191	192	202	212	214	202
Moral Defectives	2	2	2	2	2	2	2	2	1	1
Not Classified	1	1	1	1	1	1	1	1	—	—
TOTAL ..	298	313	319	312	315	316	322	332	338	328
In Hospitals	268	272	279	276	282	289	300	310	321	309
On Licence	27	38	38	34	31	25	19	17	12	13
Under Guardianship	3	3	2	2	2	2	3	5	5	6
TOTAL ..	298	313	319	312	315	316	322	332	338	328
New Cases	9	23	18	7	18	16	26	24	22	12
Discharges and Deaths ..	11	8	12	14	15	15	20	14	16	22
Increase on Previous Year	—	15	6	—	3	1	6	10	6	—
Decrease on Previous Year	2	—	—	7	—	—	—	—	—	10
Urgent Waiting List ..	—	—	6	11	11	14	10	11	11	9

TABLE XII

Cases under Order 1947-1956

	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956
1. WELSH INSTITUTIONS										
Ely Lodge ..	196	211	216	212	218	219	214	221	223	217
Brynhyfred ..	—	—	1	2	2	2	3	3	4	4
Garth Angharad ..	—	—	—	—	—	1	—	—	—	—
Hensol Castle ..	34	35	32	27	27	25	33	37	43	47
Llanfrechfa Grange ..	—	—	—	—	—	—	2	2	2	2
Llys Maldwyn ..	—	—	—	—	—	2	3	3	3	2
Llwyn View ..	—	—	—	—	1	1	1	1	1	—
	230	246	249	241	248	250	256	267	276	272
2. ENGLISH INSTITUTIONS										
Eltoe House, Leyton	10	10	10	10	10	10	11	11	11	9
Hortham Colony, Bristol	7	7	7	7	6	5	6	3	3	5
House of Help, Bath ..	3	3	3	3	3	3	3	3	3	1
Leybourne Grange ..	—	—	1	1	1	1	1	1	—	—
Royal Hostel, Elsted	—	1	1	1	1	1	1	1	1	1
Royal Western Counties, Starcross ..	—	—	1	1	1	3	6	5	5	5
Sandhill Park ..	—	—	—	—	—	—	—	1	—	—
St. Elizabeth's ..	1	1	1	1	1	1	1	1	1	1
St. Francis', Buntingford	1	1	1	1	1	—	—	—	1	1
St. Joseph's, Sudbury	2	2	2	2	2	2	2	2	2	2
St. Margaret's, Birmingham ..	—	—	—	—	—	1	1	1	—	—
St. Mary's, Alton ..	1	1	1	1	1	1	1	1	—	—
St. Mary's, Painswick	2	2	2	2	2	2	2	2	2	—
St. Mary's, Roehampton	—	—	1	1	1	1	1	1	1	1
St. Mary's, Weston ..	—	—	1	1	1	1	1	1	1	1
St. Raphaels, Potters Bar	1	1	1	1	1	1	1	1	1	—
St. Teresa's ..	3	3	3	3	3	3	2	2	2	1
Stoke Park Colony ..	19	19	18	20	18	17	16	15	14	12
State Institutions ..	15	13	14	13	12	11	7	8	9	10
	65	64	68	69	65	64	63	60	57	50
3. GUARDIANSHIP CASES										
In Wales ..	2	2	1	1	1	1	2	4	4	5
In England ..	1	1	1	1	1	1	1	1	1	1
	3	3	2	2	2	2	3	5	5	6

VIII—REPORT FOR 1956

of Mr. W. G. PYATT, Chief Public Health Inspector

In submitting my thirtieth and last report as your Chief Public Health Inspector may I have the privilege of saying how much I have enjoyed my term of office in the City. This has been largely due to the very happy relationship that has always prevailed between the Health Committee and myself and to the confidence, support and consideration that each and every member of the Committee has always given me. This happy relationship has also extended to all other members of the Council. My tribute is also due to all other officials with whom I have been regularly in contact who have always been most helpful and co-operative. Finally, may I put on record my appreciation of the support, loyalty and friendship that I have always received from my own staff, for without their efforts none of the progress that has been made would have been possible.

During my service in Cardiff the work of the Public Health Inspector has broadened considerably. Amongst many others such important matters as slum clearance, the abatement of overcrowding, clean air and clean food were not considered seriously 30 years ago and we are now only beginning to tackle these problems. In this respect it is interesting to quote extracts from the Registrar General's Census of 1951. This report contains interesting figures regarding the lack of amenities in houses in the following terms. The term household is used in the report instead of family without any material alteration of meaning. Data regarding piped water supply, cooking stoves, kitchen sinks, water closets and fixed baths for the use of private households was derived from questions answered by householders on the census schedule and as emphasised there was probably some inconsistency in answering these questions owing to uncertainty amongst householders of the precise meaning of the somewhat complicated definition of these arrangements. In spite of this the Report states that the record gives a sufficiently accurate broad picture of the conditions.

The conditions disclosed in Cardiff were as follows :—

32%	of all households were sharing or had no piped water supply
20%	do. do. cooking stove
25%	do. do. kitchen sink
30%	do. do. water closet
49%	do. do. fixed bath

It will be realised that these percentages particularly in relation to water supply, cooking stoves, sinks and water closets, do not mean that these amenities are lacking but rather that they have to be shared since the number of houses without a mains water supply is infinitesimal, and the number of closets not on the water carriage system is negligible. Furthermore, the amount of new building during the past six years will also have reduced these percentages considerably but it is a fact that the lack of baths in the smaller type houses in the City is a problem that will have to be faced in the near future. Unfortunately at the moment there are no powers which enable local authorities to ask for baths where these are lacking except the inducement of an Improvement Grant which so far has not appealed to the owners of rented property.

HOUSING

The following statement gives particulars in relation to housing for 1956 :—

1. *Inspection of Dwelling-houses during the Year :—*

(1) (a) Total number of dwelling-houses inspected for housing defects (under Public Health or Housing Acts)	.. ..	4,180
(b) Number of inspections made for the purpose	.. ..	11,200

(2) (a)	Number of dwelling-houses (included under sub-head (1) above) which were inspected and recorded under the Housing Consolidated Regulations, 1925 and 1932	—
(b)	Number of inspections made for the purpose	—
(3)	Number of dwellings found to be in a state so dangerous or injurious to health as to be unfit for human habitation	103
(4)	Number of dwellings (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation	731
2.	<i>Remedy of Defects during the year without Service of Formal Notices :—</i> Number of defective dwelling-houses rendered fit in consequence of informal action by the Local Authority or their officers	406
3.	<i>Action under Statutory Powers during the Year :—</i>	
(a)	Proceedings under Sections 9 and 10 of the Housing Act, 1936 :—	
(i)	Number of dwelling-houses in respect of which notices were served requiring repairs	46
(ii)	Number of dwelling-houses which were rendered fit after service of formal notices :—	
(a)	By owners	41
(b)	By Local Authority in default of owners	2
(b)	Proceedings under Public Health Acts :—	
(1)	Number of dwelling-houses in respect of which notices were served requiring defects to be remedied	380
(2)	Number of dwelling-houses in which defects were remedied after service of formal notices :—	
(a)	By owners	274
(b)	By Local Authority in default of owners	1
(c)	Proceedings under Sections 11 and 13, of the Housing Act, 1936 :—	
(i)	Number of dwelling-houses in respect of which Demolition Orders were made	19
(ii)	Number of dwelling-houses demolished in pursuance of Demolition Orders	11
(iii)	Undertakings accepted	24
(d)	Proceedings under Section 12 of the Housing Act, 1936 :—	
(i)	Number of parts of buildings or underground rooms in respect of which Closing Orders were made	10
(ii)	Number of separate basements or underground rooms in respect of which Closing Orders were determined ; the basement or room having been rendered fit	—
(iii)	Undertakings accepted	—
(e)	Proceedings under Section 10 of the Local Government (Miscellaneous Provisions) Act, 1953 :—	
(i)	Number of dwelling-houses in respect of which Closing Orders were made in lieu of Demolition Orders	70

An examination of the preceding particulars will reveal that some progress has been made in dealing with unfit houses either by demolition or closure but subsequent reports will show accentuated progress in these matters. It is interesting to record that Thomas Court, the last court in the City containing dwelling houses was closed during the year. The immediate task ahead is the scheduling of groups of houses in the Docks area as a Clearance Area. This scheme will tie up with the redevelopment of the Docks area as a whole, and represents the first phase. It is proposed to build flats and maisonettes on the Hodges Row site and decant the population from the first clearance area into these. The cleared site will then be available for redevelopment and further decanting and so on. This work will throw a considerable amount of extra work on the staff and this, coupled with the intensive drives that will be made to enforce the Food Hygiene Regulations and the Clean Air Act will undoubtedly mean an increase in staff sooner or later.

The modernisation of the older properties made very little progress and this is indicated by the fact that only 61 applications for Improvement Grants were received. Of these, 42 were granted, 6 refused, 3 withdrawn and the remainder were outstanding at the end of the year.

The Housing Repairs and Rents Act, 1954, has also failed to secure any material improvement in the maintenance of the older properties since only 38 applications for certificates of disrepair were received. Since the Act became operative in August, 1954, 206 applications have been received of which 171 have been granted, 22 refused and 13 withdrawn. Only 59 certificates have been revoked.

These figures emphasise that landlords have not felt the inducements under this Act warranted the possible expenditure of large sums on repairs. The failure of the Act has now been recognised by the introduction of a new Rent Act, containing less stringent conditions, in addition to decontrolling properties with a rateable value of over £30. The new Act will become operative on 6th July next year.

Council Housing Estates.—The following is a record of the work done in connection with the sanitary condition of the Council housing estates :—

Vacant houses inspected	..	..	570
Visits regarding exchanges and transfers	..	..	277
Visits regarding vermin, cleansing, overcrowding, etc.	..	..	27
Visits regarding rats, poultry, trading, etc.	..	..	4
Following-up visits	..	..	7
Visits to families prior to rehousing in Council houses	..	..	420
Other visits (Estate depots, etc.)	..	..	727
TOTAL			2,032

The number of new houses (including shops, flats and bungalows) built during the year was 566 and considering the demands from T.B. and ordinary applicants and tenants of condemned houses, this number cannot be considered as very satisfactory in view of the large number of families still awaiting rehousing.

The number of bungalows provided during the year dropped to a very low level so that many of the older applicants who had been passed for rehousing many months before were still waiting to be rehoused at the end of the year.

Owing to various causes the number of Council Houses being vacated voluntarily by tenants is on the increase so this increased vacancy rate helps to keep the rehousing programme moving. The number of points necessary for rehousing dropped very slightly during the year.

The provision of accommodation for individual elderly females will fill a real need and although none had been completed during the period under review a number of flatlets are in course of erection and their completion should considerably reduce the hardships from which some of these elderly people are now suffering. These flatlets should also assist in the ultimate solution of the housing problem since some of the persons to be allotted this accommodation are at present the sole occupants of bungalows and houses which on vacancy can then be put to full use by the rehousing of O.A.P. couples or families, according to the type of property vacated.

The percentage of vacant Council Houses found verminous during the year was 0.7 as compared with 0.5 in 1955 and 0.9 in 1954. This figure, although it shows a slight increase, cannot be considered unsatisfactory and a slight fluctuation around this level must be expected whilst the occasional problem family has to be dealt with and the slum clearance drive is accentuated.

GENERAL SANITARY INSPECTION

The number of complaints of nuisances received and dealt with was 3,370.

The numbers of inspections and visits made by public health inspectors and the numbers of notices served were as follows :—

	Inspections or Visits	Intimation Notices Served	Statutory Notices Served
Houses	4,180	1,175	94
Re-inspection of houses	7,020	—	426
Houses inspected and recorded	—	—	—
Re-inspections of recorded houses	—	—	—
Milkshops, etc.	376	1	—
Offensive trades	24	2	—
Non-mechanical factories	211	2	—
Mechanical factories	764	10	1
Workplaces	99	—	—
Outworker's premises	10	—	—
Shop premises	1,486	46	—
Seamen's lodging houses :—			
Day	282	5	—
Night	38	—	—
Common lodging houses :—			
Day	19	—	—
Night	—	—	—
Other premises, etc.	19,011	293	42
TOTAL ..	33,520	1,534	563

The number of drains tested was 368 (277 with smoke and 91 with chemicals).

Choked drains are dealt with as a first priority, and are usually cleared the day the matter is reported. Action for the clearance of a private drain is taken under a local Act by the service of a 24 hour notice, the Corporation effecting the clearance at the expiry of this period ; combined drains or public sewers as they are now called, are dealt with immediately by arrangement with the City Surveyor's Department whereby the cost of clearance is a public charge.

Sewermen are always available for this work, and where the cost is recoverable from a private owner this is a flat rate of 26/6 irrespective of the distance to be travelled, and the time involved. Frequently when a chokeage occurs in a private drain the owner signs an agreement authorising the Corporation to clear the drain at his expense and the work is immediately done without the formality of serving an official notice.

The following is a summary of nuisances abated, repairs executed, etc., under the supervision of the public health inspectors.

Vermin (Private Houses)

Number of houses found verminous	..	..	39
Number of houses where vermin was abated	..	..	35

Nuisances Abated, etc.

HOUSES

Number extensively repaired	..	..	119
Number where minor repairs completed	..	..	539
Dirty conditions remedied	..	..	3
Sanitary Dustbins provided	..	..	4

DRAINAGE

Drains tested—smoke	..	..	277
Drains tested—chemicals	..	..	91
New drains constructed	..	..	20
Drains re-laid or repaired	..	..	145
Drains cleansed	..	..	1,108
Troughs provided	..	..	16
Troughs repaired	..	..	3

W.C.'s

Additional W.C.'s provided	..	..	2
W.C.'s reconstructed or repaired	52
Flushing apparatus provided	16

URINALS

Reconstructed or Repaired	1
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WATER SUPPLY

Samples of Water taken for analysis	23
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SWIMMING BATHS

Samples of water taken	304
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SEAMEN'S LODGING HOUSES

Repairs or improvements effected	6
----------------------------------	----	----	---

TENTS, VANS, SHEDS

Removed	7
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FOOD VEHICLES AND PERSONNEL

Warnings regarding general cleanliness	4
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ICE CREAM PREMISES

Number of premises where sanitary improvements have been effected	2
Washing facilities provided or improved (geysers)	..	..	12
Samples obtained	..	..	46

FOOD SHOPS, KITCHENS, FRIED FISH SHOPS, ETC.

Improved or repaired	..	..	..	..	22
Accumulations removed	..	..	..	..	4
Cleanliness improved	..	..	..	..	10
Washing facilities provided or improved (geysers)	..				21

OFFENSIVE TRADES AND KNACKERS YARDS

Improved or repaired	1
----------------------	----	----	----	----	---

BACK LANES

Accumulations removed	2
-----------------------	----	----	----	----	---

PHARMACY AND POISONS ACT

Visits	4
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MERCHANDISE MARKS ACT, 1926

Visits	5
Warnings regarding labelling	3

STABLES, PIGGERIES, ETC.

Sanitary Conditions Improved	..	..	..	..	4
Accumulations removed	..	..	..	..	1

SHOPS ACT INSPECTIONS

Visits to Shops	..	..	..	..	..	1,388
Visits to Shops (Sundays)	..	..	..	..	..	103

Observations :—

Closing Orders (Sundays)	..	..	..	..	182
Closing Orders	..	..	..	..	82
Half Holiday Orders	..	..	..	..	552

Warnings :—

Weekly half-holiday	..	..	..	..	36
Closing Orders	..	..	..	..	12
Assistants half-holiday	..	..	..	..	2
Young Persons (Employment Act)	..	..	..	..	3
Sunday Closing	..	..	..	..	27
Notices Served—Intimation	.	..	..	..	—
Statutory	..	..	..	..	—
Notices Compiled—Intimation	.	..	..	..	—
Statutory	..	..	..	..	—

Common Lodging Houses.—There are two registered common lodging houses.

Seamen's Lodging Houses.—There are 36 licensed seamen's lodging houses.

RODENT CONTROL

As in previous years the sewerage system in the City has been treated twice during the year. Districts which when previously treated were found to be free from infestation were all test baited and any evidence of rats being present was followed up by baiting with poison.

New districts such as Ely Racecourse, Caerau and Sweldon, Llanishen, Gabalfa, Rumney and Llanrumney which have never before been treated en bloc were all dealt with during the year and in future will receive the same attention as the other districts.

Experimental treatments were carried out by officers of the Ministry of Agriculture and Fisheries and ourselves for the purpose of testing present methods of treatment and any improvements in technique that were desirable.

Council properties comprising the Transport Department's Bus Depot and Offices, the Public Works Department Yards, stores, workshops, garage, canteens, offices, pump-houses, the Central Market, Roath Market, the Main Depot and other sections of the Parks Department, the river and canal banks, and all the refuse tips within the City were regularly treated.

The Corporation undertook to maintain treatments at various business premises including food stores, cafes, warehouses, engineering works, dry docks, breweries, malt-houses, cinemas and the Royal Infirmary. The cost is on a contract basis ranging from 30/- to £63. In all, 336 business concerns are availing themselves of this service, the income from which totalled £2,101, which is £252 more than the previous year.

The yearly increase in the amount received for rodent control from private firms indicates that the service is effective and is not only appreciated by those firms who regularly renew their contracts, but is also the means of attracting new contracts.

No charge is made for advice and treatment at private dwellings which are dealt with by two operatives who work in direct contact with the Health Inspectors.

The number of complaints of rat and mice infestations is still large and in particular it has been noted that a large proportion of rat complaints come from the houses on the new housing estates where rats are attracted from the surrounding countryside during the course of building operations.

FACTORIES

The numbers and type of factories on the register are as follows :—

Bakehouses	..	..	..	72
Laundries	..	..	..	24
Tailors	..	..	..	41
Dressmakers and Milliners			..	38
Boot Repairers		..	..	95
Miscellaneous	..	..	..	750

Details of the sanitary inspection of factories under the Factories Act, 1937, are as follows :—

Part I of the Act

1.—INSPECTIONS FOR PURPOSES OF PROVISIONS AS TO HEALTH

PREMISES (1)	Number on Register (3)	Number of		
		Inspections (4)	Written Notices (5)	Occupiers Prosecuted (6)
(i) Factories in which Sections 1, 2, 3, 4 and 6 are to be enforced by Local Authorities	236	211	2	—
(ii) Factories not included in (1) in which Section 7 is enforced by the Local Authority	784	764	11	—
(iii) Other Premises in which Section 7 is enforced by the Local Authority (excluding out-workers' premises) ..	32	57	—	—
TOTAL ..	1,052	1,032	13	—

2.—CASES IN WHICH DEFECTS WERE FOUND

Particulars (1)	Number of cases in which defects were found				Number of cases in which prosecutions were instituted (7)
	Found (3)	Remedied (4)	Referred to H.M. Inspector (5)	Referred by H.M. Inspector (6)	
Want of cleanliness (S.1) ..	—	—	—	—	—
Overcrowding (S.2) ..	—	—	—	—	—
Unreasonable temperature (S.3) ..	—	—	—	—	—
Inadequate ventilation (S.4) ..	1	—	—	—	—
Ineffective drainage of floors (S.6) ..	—	—	—	—	—
Sanitary Conveniences (S.7) :—					
(a) Insufficient ..	6	—	—	5	—
(b) Unsuitable or defective ..	5	—	—	5	—
(c) Not separate for sexes ..	—	—	—	—	—
Other offences against the Act (not including offences relating to Out-work)	1	2	1	1	—
TOTAL ..	13	2	1	11	—

Part VIII of the Act

OUTWORK

	Section 110			Section 111		
	No. of out-workers in August list required by Section 110 (1) (c) (3)	No. of cases of default in sending lists to the Council (4)	No. of prosecutions for failure to supply lists (5)	No. of instances of work in unwhole- some premises (6)	Notices served (7)	Prosecu- tions (8)
Wearing Apparel—						
Making, etc. ..	3	—	—	—	—	—
Textile Fabric—						
Weaving ..	20	—	—	—	—	—
Curtains & Furniture Hangings ..	5	—	—	—	—	—

CLEAN AIR ACT, 1956

The following is a copy of the report that was submitted to the Health Committee in September.

“In general it can be stated that the powers under this Act are very much wider than hitherto and many of the defences which were available under the old sections in the Public Health Act, 1936, and were a hinderance to progress, have been abolished. Whereas the powers for smoke abatement were contained in one section in the 1936 Act, now the subject of clean air is considered of sufficient importance to warrant a comprehensive Act based on the up-to-date recommendations of the ‘Beaver’ Committee. The following is a summary of the main provisions of the Act :—

- Sections 1& 2. Prohibits the emission of dark smoke from the chimney of any building. Dark smoke is defined. The section lays down several defences and in particular specific defences are available for a period of 7 years after the Act becomes operative.
- Section 3. New furnaces (except domestic) must as far as practicable, be smokeless.
- Section 4. The Minister will make regulations for the installation of apparatus for recording smoke density from furnaces.
- Section 5. Grit and dust from furnaces must be reduced to the minimum.
- Section 6. New furnaces burning pulverised fuel or those which will burn one ton or more of solid fuel an hour must be provided with grit arresting apparatus.
- Section 10. Empowers local authorities to reject plans of factories if they consider the height of the chimneys too low.
- Section 11. Power given to local authorities to declare parts or the whole of their district a smoke control area.
- Section 12. After a smoke control area has been confirmed householders can obtain grants of at least seven-tenths of any expenditure incurred in adapting existing fireplaces to burn smokelessly.
- Section 13. Exchequer contributions will be available for reimbursing local authorities expenditure on grants given under Section 12.
- Section 15. Similar grants are available to churches, chapels and buildings used by charities, etc.
- Section 16. Powers for securing the abatement of smoke nuisances generally.
- Section 17. Smoke from factories controlled by the Alkali Act will be controlled by the Alkali Inspectorate.
- Section 19. Dark smoke from railway locomotives will now be subject to control. Smoke which is not dark and grit or dust from railway engines will continue to be exempt.
- Section 20. Dark smoke from vessels in port will now be subject to control.
- Section 22. Smoke nuisances at Crown premises must be reported to the appropriate Minister.
- Section 23. It is proposed to set up a Clean Air Council who will keep under constant review the progress made and also act in an advisory capacity.
- Section 24. Building Byclaws may require smokeless heating or cooking arrangements in new buildings.
- Section 25. Authorises local authorities to carry out research and publicity on smoke abatement.

It will be seen that dwelling houses which are considered to cause at least 50 per cent of the total air pollution must not emit dark smoke ; previously house chimneys were exempted entirely. Apart from controlling the emission of smoke from industrial plants the Act contains provisions relating to the construction of new furnaces, the height of chimneys at new factory buildings and the provision of grit arresting apparatus in new furnaces burning pulverised fuel or those which will burn one ton or more of solid fuel an hour. Building Byelaws too may require smokeless heating or cooking arrangements in new buildings. These powers of control over new buildings are very important and therefore, it is suggested that the attention of the City Surveyor through the Public Works Committee should be drawn to these requirements.

A very important part of the Act is the power given to local authorities to declare parts or the whole of their district a smoke control area. This is a new term for smokeless zones and whereas previously smokeless zones could only be established by the promotion of a private Act now smoke control areas can be declared without any formalities except by making an Order which has to be confirmed by the Ministry. An important addition applicable to a smoke control area is that the cost of the adaptation of fireplaces in private dwellings, churches, chapels, etc., will qualify for grant which has to be paid to the householder by the local authority but is partly recoverable from the Exchequer. It will be realised that a pre-requisite for smoke control areas is a sufficient supply of solid smokeless fuel. At the moment this fuel is in short supply and research is now proceeding with a view to producing a suitable fuel, to supplement the limited quantities of Coalite, Rexco and coke which are now available.

Railway engines and vessels in port are also covered but only if dark smoke is emitted. The Port Health Inspectors will, therefore, have their responsibilities under the Act.

Application of the Act to Cardiff

It will be noted that it is proposed to set up a Clean Air Council who will keep under constant review the progress that is being made and they will also act in an advisory capacity ; furthermore, local authorities are authorised to carry out research and undertake publicity campaigns. From this short resume it will be seen that the Act represents a great advance in the effective legislation for reducing smoke pollution but it will be realised that the new powers will throw a considerable burden upon the Public Health Inspectors. It should be pointed out that none of the present staff is qualified as a Smoke Inspector, and it will be realised that the subject is of a specialised character. In my opinion in order to carry out the functions of the Act efficiently it is essential that a Smoke Inspector should be appointed preferably one who not only holds the Smoke Inspector's Certificate but also has an engineering background. A man with these qualifications would not be attracted by the ordinary scales of salaries paid to Public Health Inspectors as he would rank as a Specialist and, therefore, it is suggested that his scale of remuneration should be A.P.T. Grade IV (£710-£885). A further point is that at the moment, smoke observations are only taken at the City Hall, and by the National Coal Board Research Centre, Newport Road, and it will be realised that the position of the gauges does not give a true picture of the general state of atmospheric pollution in the City. The City Hall gauge might be retained as a control with the addition of an instrument for the measurement of smoke and sulphur dioxide, and it is suggested that three more atmospheric pollution stations be set up in selected areas in the City, each comprising a deposit gauge and an instrument for the measurement of smoke and sulphur dioxide. I am indebted to Dr. A. Parker, Director, Department of Scientific and Industrial Research, who has recommended these additions, and I gather from him that the cost of a deposit gauge is £22, the lead peroxide instrument, £3 10s. 0d., and the sulphur dioxide apparatus about £30. The latter would have to be provided with a 5-amp switch socket if there is no convenient electric point near the sampling spot. Dr. Parker has offered to advise in the selection of sites for the various instruments, and if it is agreed to set up additional stations it is suggested that his offer should be accepted."

Various complaints of smoke and grit discharges were dealt with and in the majority of cases a satisfactory solution was found. Persistent complaints from the Penttyrch Street and Merches Gardens area threw a lot of work on the Department, in fact more than was justified having regard to the extent of the nuisance. Certain improvements were effected by the firms of several industries in the area and the complaints have since ceased.

I must again acknowledge the ready and valuable co-operation the Department has received from the National Industrial Fuel Efficiency Service.

Public Swimming Baths.—Following past practice, weekly samples of water from all swimming baths were obtained and invariably the reports from the Public Health Laboratory were satisfactory. Because of the polluted condition of Roath Park Lake the ban on bathing was continued.

Tents, Vans, Sheds.—The gypsy problem referred to in previous reports has not reached serious proportions since the Council obtained an injunction restraining camping on Council land. Unfortunately this does not extend to private land and on occasions action had to be taken against campers in various parts of the City. In all 97 visits to caravans were made during the year and 7 vans were eventually moved.

Dustbins.—Although there has been some improvement in the type of bins in general use in the City, it has been impossible because of the lack of sufficient staff and other more pressing problems to make a progressive drive to deal with those householders who are using insanitary refuse receptacles. This is a matter which should be tackled with vigour as soon as possible.

Aged and Infirm Persons.—Numerous instances of aged people living alone under insanitary conditions were dealt with and help in the way of cleansing and supervision was provided in appropriate cases. No orders for compulsory removal were made but several persons were admitted to hospital voluntarily.

Pet Animals Act, 1951.—Licences were issued for 7 pet animal shops.

Shops Act, 1950.—As in the previous year many complaints of illegal Sunday trading were received and this accounts for the large number of cases in the table of legal proceedings. The exemptions for Sunday trading make the operation of the Act very difficult particularly in view of the construction placed upon the definition of newly cooked provisions and refreshments in recent Court cases.

One application for exemption for closing hours was granted to an Exhibition. The Health Committee adopted their usual practice of suspending the closing hours of all shops during the 4 days preceding Christmas.

LEGAL PROCEEDINGS (SHOPS ACT)

Number	Fined	Cautioned	To pay costs only	Dismissed	Withdrawn	Amount of Fines and Costs
25	20	—	3	2	—	£ s. d. 40 4 0

Pharmacy and Poisons Act, 1933.—During the year 234 licences were renewed and 13 new licences were issued.

Legal Proceedings.—The following is a summary of legal proceedings taken during the year in connection with general sanitary inspection:—

Acts, etc., under which proceedings were taken	Number	Fined	Cautioned	To pay costs only	Dismissed	Withdrawn	Nuisance Order obtained	Amount of Fines and Costs
Public Health Act, 1936 ..	18	2	—	—	—	2	14	£ s. d. 17 6 0

Water Supply.—The department is indebted to the Water Engineer (Mr. G. W. Cover) for the following information :—

- (i) The quality and quantity of the water have been satisfactory.
- (ii) Bacteriological examinations of the water, before and after treatment, are taken ; also at various points on the distribution system. The total number of bacteriological samples taken was 880, which showed the bacterial quality of the water to be satisfactory. Chemical analyses of the water showed the chemical and physical characters to be satisfactory.
- (iii) The liability of plumbo-solvent action is negligible, but precautions are taken by way of the controlled alkalinity of the water.
- (iv) All potable water is sterilised by chlorine treatment.
- (v) It is estimated that there are approximately 83,613 separately rated dwelling places supplied within the area of supply, and the population served is estimated at 304,000. For practical purposes there is no domestic supply by means of stand-pipes.

FOOD AND MILK

All slaughtering, with the exception of a private slaughterhouse in connection with a Bacon Factory, is carried out at the Public Abattoir under the supervision of the Veterinary Officer. Carcases at the private slaughterhouse are inspected by the Public Health Inspector for the district. During the year 5,080 pigs were slaughtered at this slaughterhouse, tuberculosis being found in 17 instances, a proportion of 0.3 per cent, 4 unsound carcases of pork were destroyed, and the total weight of unsound meat (including offal) surrendered, was 9 cwt. 16 lbs.

During the year the Council made new byelaws for private slaughterhouses.

Public Health Inspectors made 6,347 visits to restaurants, food preparing places, shops, stores, markets, etc., in the City in connection with the hygienic condition of the premises and the inspection of foodstuffs. The approximate weight of diseased or unsound food surrendered as unfit was 38 tons 12 cwt., and 84 notices were served for the remedy of insanitary conditions.

Knackers Yard.—The only Knackers Yard in the City is regularly inspected and as it is owned by one of the most reputable firms no difficulties are experienced. 47 horses were slaughtered and 25 horse carcases were dealt with during the year.

Offensive Trades.—Twenty-nine offensive trades are established in the city which include gut scrapers, tripe boilers, rag and bone dealers and a fish meal factory. These are kept under regular observation.

Ice Cream.—There are 28 firms or persons registered for the manufacture of ice cream ; of these only 16 are manufacturing at the moment, 7 producing a hot mix and the remainder a cold mix. Of the 663 retailers of ice cream only 34 sell it loose, the remainder being registered for wrapped ice cream only. Although it is doubtful whether the Act permits conditions of sale to be inserted on the licence, this is very desirable where numerous other commodities are sold from the same shop ; for this reason the Health Committee have always considered it desirable to issue licences in appropriate cases which are restricted to wrapped ice cream only.

Forty-six samples of ice cream were taken for bacteriological examination and of these 34 were in Provisional Grade 1, 2 in Provisional Grade 2, and 2 in Provisional Grade 3, and 4 in Provisional Grade 4. Four samples could not be examined as it was impossible to observe the conditions for pre-incubation temperatures.

The number of firms registered for the manufacture of ice cream has been reduced considerably and it will be noted that now only 16 are actually engaged in the manufacturing process.

In all cases of unsatisfactory results the Public Health Inspectors visit the vendors and examine their methods. In no case was any drastic action necessary as the Department always receives ready co-operation from the trade.

Food Hygiene.—In addition to the registered food premises of which particulars are given in other portions of this report, the number of established businesses in other food trades is as follows :—

Butchers	..	253
Bakers and Confectioners	..	119
Cafes and Restaurants	..	181
Greengrocers and Fruiterers	..	332

A milepost in the drive for clean food was the new Food Hygiene Regulations which became partly operative on 1st January, and fully operative on 1st July. These Regulations replace the older powers which were entirely inadequate and we now have up-to-date powers which are immensely stronger and detailed in their scope. Work under these Regulations occupied much of the time of the Inspectors and there is no doubt that considerable progress has been made. The manner in which meat from the Abattoir is now handled, the care taken to prevent food being exposed to contamination, the growth of the refrigerated window and display cabinets in shops are all evidence of this, yet much still remains to be done if we are to achieve the high standards that are desirable. The various cafes in the Docks area presented a particularly difficult problem, but each cafe has been visited and our requirements, often involving reconstructing the premises, are well in hand.

Additional work was also created by the sampling of large stocks of liquid frozen egg deposited at the Cold Stores. Many of the batches of these consignments were positive to *Salmonella* organisms and had to be either destroyed or conditionally released for special processing. The sampling procedure is difficult, as is also the sorting out of the various batches for the purpose of obtaining representative samples of the whole consignment and it is to be hoped that steps will be taken to ensure that this commodity will not be imported in future unless it can be guaranteed free from infection.

Sampling of the floor surfaces, equipment and table tops at bakeries, also the taking of sewer swabs again provided valuable research material for the Public Health Laboratory Service.

All these matters were dealt with in detail by the Medical Officer of Health and myself in papers given to a Sessional Meeting of the Royal Society of Health in Cardiff last June.

Propaganda in the way of talks to various organisations were again a prominent feature. This branch of the work is extending and is all to the good because it enables the Public Health Inspector to secure more co-operation and assistance from the public in matters affecting the public health. During the year the following papers and talks were given :—

Paper on the Food Hygiene Regulations.—Sessional Meeting of the Royal Society of Health in London.

Paper on the Method of Tracing Vehicle and Source in *Salmonella* Infections.—Sessional Meeting of the Royal Society of Health in Cardiff.

Paper on the Food Hygiene Regulations.—Refresher Course, South Western Centre, Public Health Inspectors Association.

Talk on Food Hygiene to the Cardiff Grocers' Association.

Talks on Hygiene to the Civil Defence Corps.

Talk on Food Hygiene to the Meat Traders.

Talks on Food Hygiene to Students and Managers in the Licensed Trades.

Talks on Food Hygiene to the South Wales Industrial Catering Association.

Talk on Environmental Hygiene to the Cardiff Women's Club.

Talk on Environmental Hygiene to the Penarth Rotary Club.

Several Public Health Inspectors, students and others from countries overseas attended the Department for the purpose of seeing how public health administration is carried on in this country.

Details of Premises registered under Section 47, Cardiff Corporation Act, 1934

Manufacture of Ice Cream	..	28
Sale of Ice Cream	..	663
Manufacture of Meat Products	..	106
Dairies	..	72
Shops selling Bottled Milk	..	224
Fried Fish Shops	..	75

The number of inspections of these premises were :—

Ice Cream premises	..	513
Meat Products premises	..	584
Dairies and Milkshops	..	376
Fried Fish Shops	..	148

MILK SUPPLY

Excluding those selling bottled milk only, there are 72 dairies on the register whilst there are 224 shops registered for the sale of bottled milk.

The Health Committee have always frowned upon the small general shop selling loose milk and have therefore established the principle of bottled milk only in such premises.

Five firms are now producing pasteurised milk in local dairies. Of these 2 are using the Holder Process and 3 the H.T.S.T. process. One firm is producing Sterilised Milk.

Six hundred and thirty-five samples of Pasteurised Milk were taken to ascertain whether the standard was being maintained ; (from the dairy or on the round), 602 samples were in every respect satisfactory, 25 failed to comply with the Methylene Blue Test, and 8 failed on the Phosphatase Test. In all cases where samples failed to comply with the standard follow up visits were made by Public Health Inspectors.

One hundred and ninety-three samples of T.T. (Pasteurised) Milk were taken, 7 failed the Methylene Blue Test and 2 failed the Phosphatase Test. Seventy-two samples of Sterilised Milk were taken and proved to be satisfactory.

Of 98 samples of Tuberculin Tested Milk examined, 87 were up to standard and 11 failed in the Methylene Blue Test.

Fifty-four samples of Tuberculin Tested Milk were submitted for biological examination and found to be satisfactory.

Phenomenal changes in the methods of distribution of milk have taken place in recent years. The days of loose raw milk produced from cows which were often Tuberculous and delivered by over 200 retailers in the City, have passed. Now almost 70 per cent of the dairy herds in the country are attested, over 80 per cent of the milk sold by retail is heat treated and in Specified Areas such as Cardiff, only heat treated or Tuberculin Tested Milk can be sold. All milk is now sold in bottles which have to be sealed and capped at the dairy instead of being delivered into jugs at the door from an open can.

These changes have raised the standard of the milk supply to a level which was only a dream a few years ago. It can be truthfully stated that milk, which in the past has been a serious public health problem is now no longer a problem. In Cardiff, 5 processing depots handle the bulk of the supply and adulteration is almost a thing of the past.

The average dairyman is no longer bothered with the upkeep of an expensive plant but is now only a distributor for he obtains his milk already bottled from a Depot, delivers it and returns the empties to the Depot where they are cleaned in a modern bottle washing machine. The only exceptions are 33 producer distributors or distributors who are licensed to sell Tuberculin Tested raw milk in the City. These bottle the milk at their own premises.

In recent years two new grades of milk have become increasingly popular. These are "Sterilised" milk which will keep almost indefinitely if the seal of the bottle is not broken and Channel Islands T.T. milk which must contain a minimum of 4 per cent Fat as against 3 per cent in other milk.

Samples of milk delivered under contract to schools and hospitals were taken regularly, also a close watch was kept on processing depots using well water. Where well water is available its use is restricted to those parts of the process such as cooling, etc., where it cannot come into contact with the milk or milk utensils.

Legal Proceedings (Food and Drugs)

Acts etc., under which proceedings were taken	Number	Fined	Cautioned	To pay costs only	Dismissed	Withdrawn	Amount of Fines and Costs
							£ s. d.
Food & Drugs Act, 1938	2	2	—	—	—	—	23 3 0

STAFF

The administration of the Agriculture (Safety, Health and Welfare Provisions) Act, 1956, is an additional duty assigned to the Inspectorial staff and it will be noted with satisfaction that the old title sanitary inspector has been superseded by public health inspector which is an indication of the broadening scope of the duties that now have to be undertaken. It is also pleasing to note that the Public Health Inspectors Education Board are now engaged in drawing up a new scheme for the training and qualifications of Public Health Inspectors. It is to be hoped that this change will result in attracting more recruits to one of the key positions in the public health service. In this connection the Health Committee have already agreed in principle to accept pupil health public inspectors and pay them during their training on the General Division scale.

Mr. R. Moore left during the year for a more lucrative appointment with another Authority.

IX—REPORT FOR 1956 of

J. H. M. HUGHES, M.R.C.V.S., D.V.S.M., F.R.S.H.,

Veterinary Officer

The Veterinary and Abattoir Section of the Department involves :—

- (1) The General administration of the Diseases of Animals Act, 1950 and all Statutory Orders made thereunder in relation to the City of Cardiff.
- (2) The inspection of livestock, meat and bye-products at Roath Abattoir.
- (3) The granting of veterinary health certificates for meat products intended for export.
- (4) The certification of disinfection of packing straw used in exported merchandise.
- (5) Veterinary attention to livestock at Whitchurch Hospital farm.
- (6) Veterinary services to the City Police Department in connection with the Protection of Animals Act, 1911.
- (7) The supervision of the management and general administration of Roath Abattoir and Meat Market.

DISEASES OF ANIMALS ACT AND ORDERS

The Act enables the Ministry of Agriculture, Fisheries and Food to make Orders for the control or eradication of certain infectious diseases of animals which are, or may be, the cause of serious losses to agriculture or a danger to the public health. The diseases now notifiable are Anthrax, Foot and Mouth Disease, Swine Fever, Fowl Pest, certain forms of Tuberculosis, Atropic Rhinitis, Epizootic Abortion in cattle, Warble Fly infestation, Sheep Scab, Parasitic Mange in horses, asses and mules, Sheep Pox, Cattle Plague, Contagious Bovine Pleuro-pneumonia, Glanders, Epizootic Lymphangitis and Rabies. The last eight named diseases are now extinct in this country. The Act provides for the care and comfort of animals in transit by road, rail, sea and air.

Swine Fever Order, 1938.—During the year 19 suspected cases of the disease were investigated. Of these one case was confirmed by the Ministry of Agriculture, Fisheries and Food, and the usual procedure under the Order was implemented. The virus disease of Swine Fever has resulted in 741 outbreaks in Great Britain in 1956. This is a decrease of 662 outbreaks compared with the previous year.

Swine Fever (Infected Areas Restrictions) Order, 1956.—In the event of Swine Fever becoming prevalent in a district the Order gives power to impose special restrictions on the holding of markets in the area and the movement of pigs into, out of and within the specified area.

Regulation of Movement of Swine Order, 1954.

Regulation of Movement of Swine (Amendment) Order, 1955.—At the weekly sales at Ely livestock Market, 87 licences were granted for the movement of 382 pigs to Roath Abattoir and piggeries within the City and 132 licences for 574 pigs to slaughterhouses and premises outside the City. In addition 686 licences were received from other authorities authorising movement of 11,911 pigs to Roath Abattoir and City piggeries from markets outside Cardiff. The assistance of the police was welcomed in visiting private premises to which pigs were licensed during the subsequent 28 days compulsory detention.

Rabies Order, 1938.—Although this disease is now extinct in Great Britain there is always the danger of its reintroduction by illegally imported dogs. During the year 28 dogs, reported by the Police as having bitten persons, were examined and found free from communicable disease.

Anthrax Order, 1938.—Eighteen suspected cases of anthrax in animals were investigated and bacteriological examinations made which all proved negative. The carcase of a cow, moved to a local knacker yard from a farm where the disease was confirmed, was destroyed as a precautionary measure.

Diseases of Animals (Boiling of Animal Foodstuffs) Order, 1947.—A total of 101 visits were made to pig keepers premises for the inspection of boiling facilities. In all cases the Order was duly obeyed.

Fowl Pest Order, 1956.—During the first quarter, movement restrictions imposed in respect of 5 infected premises and 11 contiguous premises, in December, 1955, were removed. Two suspected cases of Fowl Pest were investigated both of which proved negative.

Fowl Pest (Infected Areas Restrictions) Order, 1956.—In the event of Fowl Pest becoming prevalent in an area the Order gives power to impose special restrictions on the holding of markets and movements of poultry into, within and out of a defined area.

Fowl Pest (Mid-Lancashire Infected Area) Order, 1956.—Owing to a severe outbreak of Fowl Pest the Order imposed restrictions on the movement of Poultry in part of Lancashire.

The Live Poultry (S. Wales and S.W. England) Order, 1955.—Court proceedings were taken against two people for illegally moving poultry into the City. Fines of £3 and £2 were imposed.

The Live Poultry (Restriction) Order, 1954.—Court proceedings were taken against a Cardiff poultry dealer on three summonses for disposing of live poultry contrary to the Order. Penalties of £5 and £1 ls. 0d. costs were imposed on each summons.

The Live Poultry (Restrictions) (Amendment) Order, 1956.—The Order amends the Live Poultry (Restrictions) Order, 1954, by prohibiting the holding of markets, fairs or sales of store poultry in England and Wales during the period 1st October to 31st December each year.

The Live Poultry (Movement Records) Order, 1954.—Court proceedings against a Cardiff Poultry dealer resulted in a fine of £5 and £1 ls. 0d. costs being imposed.

The Live Poultry (Mid-Norfolk) (Amendment) Order, 1956.

The Live Poultry (Mid-Lancashire) (Amendment) Order, 1956.

The Live Poultry (Essex) (Amendment) Order, 1956.—The Orders reduced the areas defined in the Principal Orders.

The Live Poultry (Mid-Lancashire) (Revocation) Order, 1956.

The Live Poultry (S. Wales and S.W. England) (Revocation) Order, 1956.

The Live Poultry (Mid-Norfolk) (Revocation) Order, 1956.

The Live Poultry (Essex) (Revocation) Order, 1956.—As a result of considerable reduction of Fowl Pest in these Areas the special restrictions imposed were removed.

Poultry Premises and Vehicles (Disinfection) Order, 1956.—Forty-three visits were made to inspect premises, vehicles and equipment of poultry slaughterers. Under the Order seven notices of disinfection were served in respect of premises and equipment.

Foot and Mouth Disease Orders, 1928-1938.—During the year 162 outbreaks were recorded in this country involving the slaughter of 28,505 animals. An outbreak of Foot and Mouth Disease occurred at Roath Abattoir being introduced by sheep from the Forest of Dean area and entailed the destruction of all stock at the Abattoir. As a result of effective control measures it is gratifying to know that no spread of the disease resulted from that outbreak. The City of Cardiff was included in an Infected area on two other occasions as a result of outbreaks in Glamorgan and Monmouthshire. Movements of stock into and within the City were controlled by licensing and the weekly sales of livestock at Ely Market were prohibited on five occasions.

Foot and Mouth Disease (Infected and Controlled Areas Restrictions) (Amendment) Order, 1956.—The Order introduced some alteration in administering areas declared Infected or Controlled under the 1938 Orders. The principal amendment relates to the licensing of livestock into and within these areas.

Animals (Landing from Channel Islands, Isle of Man), Northern Ireland and Republic of Ireland) Order, 1955.—During the year a total of 730 Irish cattle were licensed to Roath Abattoir from the ports of Fishguard and Birkenhead.

Animals (Importation) Order, 1930.—Nineteen polled shorthorn cattle were imported into Cardiff Docks from the U.S.A. and 11 camels imported under the Order were exhibited at a circus in Cardiff. The camels were kept under observation, isolated from other stock and the ground disinfected on removal.

Exportation of Horses (Minimum Values) Order, 1956.—The Order revokes the 1950 Order and stipulates the minimum values of horses to be exported from Great Britain to be (a) Heavy draught horse—£105; (b) Vanner, mule or jennet—£100; (c) Ass—£20.

Transit of Animals Orders, 1927-1947.—Visits were paid to the railway cattle sidings in the City to inspect animals in the course of transit. There was no reason to prohibit the carriage of any animal inspected.

Markets, Sales and Lairs Orders, 1925-1927.—All the weekly sales of livestock at Ely Market were visited in connection with these Orders.

THE TUBERCULOSIS (ATTESTED HERDS) SCHEME, 1950

The tuberculin testing of cattle herds has progressed satisfactorily during the year and in five years it is hoped to have bovine tuberculosis eliminated. The figures below show the development of attested herds, i.e. herds officially free from all trace of tuberculosis, during the past four years.

	England	Wales	Scotland	Total
31st December, 1956 ..	93,087	35,346	39,308	167,741
31st December, 1955 ..	81,869	33,949	36,259	152,077
31st December, 1954 ..	67,007	32,018	33,208	132,233
31st December, 1953 ..	54,332	29,158	28,385	111,875

SUMMARY OF OUTBREAKS OF SCHEDULED DISEASES IN GREAT BRITAIN FOR THE YEARS 1953-1956

	1956	1955	1954	1953
Anthrax	1,245	764	350	609
Foot and Mouth Disease ..	162	9	12	40
Fowl Pest	956	906	795	978
Swine Fever	741	1,403	1,455	2,713
Atrophic Rhinitis	11	8	4	nil

PROTECTION OF ANIMALS ACT, 1911

All work under this Act was carried out at the request of the City Police. During the year 2 ponies, 28 dogs, 5 cats, 1 donkey and 1 seagull, victims of accidents, were attended. Of these, 1 pony, 15 dogs, 5 cats, 1 donkey and 1 seagull were destroyed and the remainder treated for injuries.

PERFORMING ANIMALS (REGULATION) ACT, 1925

The performing animals used at one circus in the City were examined in accordance with Section 3 of the Act.

VETERINARY SERVICES TO OTHER DEPARTMENTS

City Police Department.—Seventy-one visits were made to examine animals at the request of the City Police.

Cardiff Mental Hospitals Management Committee.—By virtue of a financial arrangement veterinary attention is given to all livestock owned by this Committee. During the year 29 visits were paid to Whitchurch Hospital Farm.

MEAT INSPECTION SERVICE—STATISTICS

CARCASES AND OFFAL INSPECTED AND CONDEMNED IN WHOLE OR IN PART
(Revised Form as set out by Ministry of Health)

	Cattle excluding Cows	Cows	Calves	Sheep and Lambs	Pigs	Horses
Number killed	7,730	3,163	10,463	61,344	24,983	Nil
Number Inspected	7,730	3,163	10,463	61,344	24,983	—
ALL DISEASES EXCEPT TUBERCULOSIS AND CYSTICERCI :						
Whole carcases condemned ..	17	32	39	95	30	—
Carcases of which some part or organ was condemned	458	233	192	4,649	1,071	—
Percentage of the number inspected affected with disease other than tuberculosis and cysticerci	5.92	7.36	1.83	7.57	4.28	—
TUBERCULOSIS ONLY						
Whole carcases condemned ..	12	14	3	—	13	—
Carcases of which some part or organ was condemned	499	436	4	—	451	—
Percentage of the number inspected affected with Tuberculosis ..	6.45	13.78	0.03	—	1.80	—
CYSTICERCOSIS						
Carcases of which some part or organ was condemned	11	3	—	—	—	—
Carcases submitted to treatment by refrigeration	11	3	—	—	—	—
Generalized and totally condemned ..	—	—	—	—	—	—

ANIMALS SLAUGHTERED—COMPARATIVE TABLE

		YEAR					
		1956	1955	1954	1953	1952	1939
Cattle	..	10,893	8,210	12,062	13,581	12,802	6,693
Calves	..	10,463	9,238	4,892	2,353	3,361	7,788
Sheep	..	61,344	59,325	75,891	55,935	53,996	53,632
Pigs	..	24,983	29,749	29,545	9,610	3,840	25,257
TOTAL	..	107,683	106,522	122,390	81,479	73,999	93,370

TABLE SHEWING INCIDENCE OF TUBERCULOSIS IN ORGANS

Animals Slaughtered			Organs affected with Tuberculosis	Percentage	Percentage for 1955
Cattle	{ Bulls ..	160	12	7.50	5.22
	{ Cows ..	3,163	436	13.73	16.06
	{ Heifers/Steers ..	7,570	487	6.30	10.03
Calves	.. ..	10,463	4	0.03	0.05
Sheep	.. ..	61,344	nil	—	nil
Pigs	.. ..	24,983	451	1.80	1.93

TABLE SHEWING INCIDENCE OF CYSTICERCUS BOVIS

Number of Cattle slaughtered		Number of Cases of Cyst. Bovis.	Percentage of Infestation	Total Percentage	Percentage for 1955
Cows ..	3,163	3	0.08	} 0.12	0.15
Other Cattle ..	7,730	11	0.14		0.51

Condemnation Certificates.—503 Certificates were granted in respect of condemned carcasses and offals at Roath Abattoir during the year 1956.

TABLE SHEWING CASES OF REJECTION OF CARCASSES AND PART CARCASSES

	Cattle		Calves		Sheep		Pigs	
	Total	Part	Total	Part	Total	Part	Total	Part
Tuberculosis ..	28	49	2	—	—	—	13	326
Traumatism ..	2	44	1	4	2	20	1	28
Oedema and/or Eamciation ..	27	2	3	—	72	1	1	—
Pyaemia ..	—	—	4	—	—	—	—	—
Fevered, Moribund or Illbled ..	1	—	14	—	10	—	10	—
Arthritis ..	—	—	—	1	—	8	—	40
Urticaria ..	—	—	—	—	—	—	—	1
Peritonitis—Acute Septic ..	—	—	1	—	1	—	1	—
Septic Conditions ..	1	6	2	2	4	14	9	17
Jaundice ..	—	—	5	—	—	—	—	—
Immaturity ..	—	—	9	—	—	—	1	—
Melanosis ..	—	2	—	—	—	1	—	1
Erysipelas ..	—	—	—	—	—	—	2	2
Bone Taint ..	—	65	—	—	—	2	—	—
Pneumonia—Acute Septic ..	—	—	1	—	—	—	2	—
Neoplasms ..	—	—	—	—	—	—	—	1
Uraemia ..	—	—	—	—	1	—	—	—
Pleurisy ..	—	—	—	—	—	7	—	—
Abnormal Odour ..	—	3	—	—	—	—	—	—
Decomposition ..	—	8	—	—	5	3	—	—
Serious Infiltration ..	—	—	—	—	—	—	—	1
Fibrosis ..	—	3	—	—	—	—	—	—
Enteritis—Acute ..	—	—	—	—	—	—	1	—
Foot & Mouth Disease	14	—	—	—	—	—	—	—
Nephritis ..	—	3	—	—	—	—	—	—
Presternal Calcification	—	2	—	—	—	—	—	—
Lymphadenitis ..	—	—	—	—	—	—	1	—
Metritis—Septic ..	2	—	—	—	—	—	—	—
Swine Fever ..	—	—	—	—	—	—	1	—
Blood Splash ..	—	—	—	—	—	—	—	1
TOTAL ..	75	187	42	7	95	56	43	418

WEIGHT OF MEAT AND OFFAL REJECTED FROM ANIMALS SLAUGHTERED AT
ROATH ABATTOIR

	Tons	Cwts.	Qrs.	Lbs.
75 Carcases Beef	12	16	1	27
42 Carcases Veal	—	14	3	8
95 Carcases Mutton	1	7	2	14
43 Carcases Pork	2	1	1	16
187 Part Carcases Beef	6	15	3	25
7 Part Carcases Veal	—	—	2	12
56 Part Carcases Mutton	—	2	—	18
418 Part Carcases Pork	2	1	1	4
Cattle Offal	23	14	—	4
Calf Offal	—	13	—	16
Sheep Offal	5	7	3	18
Pig Offal	4	2	2	11
TOTAL ..	59	18	—	5

WEIGHT OF MEAT AND OFFAL REJECTED EX OTHER SLAUGHTERHOUSES

	Tons	Cwts.	Qrs.	Lbs.
12 Carcases Mutton	—	3	1	21
78 Carcases Pork	1	19	3	10
63 Part Carcases Beef	3	3	1	26
39 Part Carcases Mutton	—	4	2	—
1 Part Carcase Pork	—	—	—	25
Cattle Offal	—	7	2	22
Calf Offal	—	1	—	25
Sheep Offal	—	5	—	10
Pig Offal	—	10	3	—
TOTAL ..	6	16	—	27

TOTAL MEAT AND OFFAL REJECTED AT ROATH MARKET DURING 1956

66 Tons 14 cwts. 1 Qr. 4 lbs.

NUMBER OF DISEASED ORGANS REJECTED

	Cattle	Calves	Sheep	Pigs
HEADS (including Tongues) :—				
Tuberculosis	504	4	—	317
Other Conditions	84	98	1,075	1
LUNGS :—				
Tuberculosis	793	—	—	—
Other Conditions	206	—	—	—
HEARTS :—				
Tuberculosis	744	—	—	—
Other Conditions	188	—	—	—
PLUCKS :—				
Tuberculosis	—	4	—	172
Other Conditions	—	126	1,193	444
SKIRTS :—				
Tuberculosis	326	—	—	—
Other Conditions	114	—	—	—
LIVERS :—				
Tuberculosis	200	—	—	—
Other Conditions	2,859	57	3,308	477
TRIPES :—				
Tuberculosis	47	—	—	—
Other Conditions	135	—	—	—

ROATH MARKET ADMINISTRATION

The comparative table of animals slaughtered at the abattoir, given in the Meat Inspection section, shows an overall increase of 1,161 animals on 1955 figures. The increase of some 32 per cent in cattle killed was particularly noticeable and indicated the production of beef cattle in the country was kept at a high level.

In the Annual Report for 1955 comment was made on the effect of the Report of the Interdepartmental Committee on Slaughterhouses, published in that year, particularly in relation to the policy of moderate concentration of these buildings. In May of this year a Government White Paper was published which indicated it was no longer advisable to aim at a moderate concentration of slaughterhouses by means of central planning.

The new policy involves the prescription of minimum statutory standards for the construction, layout and equipment of slaughterhouses in relation to lairring, handling and slaughter of animals, hygienic conditions for handling meat and satisfactory welfare facilities for persons working in slaughterhouses. After the passing of the necessary legislation each local authority will be required to submit a report on existing facilities in its area which meet the prescribed standards or are likely to reach these standards at a date to be determined. Between the passing of the enabling legislation and the submission of reports there will be a period in which traders will be free to develop slaughterhouse facilities according to their needs. Once the report of a local authority has been submitted to the Minister and been published, the Minister's consent will be required before any further applications for licences are granted. All slaughterhouse reports will require the Minister's approval after taking into consideration any representations made to him during two months following the publication of reports. It is therefore apparent that planning authority and compliance with the regulations will be the only factors which will limit licences to operate slaughterhouses. The power of a local authority, that has provided a public slaughterhouse, to determine by resolution to refuse further licences will, under certain conditions, remain in force. The City Council has already adopted a resolution to this effect.

A draft of the regulations governing minimum requirements was issued during the year for the observations of interested parties. If implemented in statutory form they will entail considerable structural alterations to Roath Abattoir together with the installation of various new plant.

Slaughter of Animals Act, 1933 to 1954.—During the year 2 licences and 48 renewals of licences were granted to persons in the City to slaughter animals. A number of these men are not habitually engaged in slaughtering operations.

X—Report for 1956 of

Mr. STANLEY DIXON, M.Sc., F.R.I.C., Public Analyst

The total number of samples examined during the year was 2,741, which is the highest number yet recorded for the laboratory and is a very considerable increase over the corresponding figure for the year 1955, as will be seen in the following table :—

Total number of Samples examined

	1955	1956
Under the Food and Drugs Act ..	1,598	1,990
Under the Fertilisers and Feeding Stuffs Act	32	50
Waters and Effluents	389	374
Miscellaneous	334	327
	2,353	2,741

This increase in the work was made possible by the efficient service rendered by all the members of my staff, which during the year was brought to its full establishment for the first time since December, 1954.

On 2nd January, 1956, Mrs. M. G. O'Sullivan, B.Sc., commenced duty as second Assistant Chemist, the post having been vacant for more than nine months owing to difficulty in obtaining suitable assistance. It is a pleasure to record that in October, 1956, Mrs. O'Sullivan obtained the Associateship of the Royal Institute of Chemistry. In October also, Mr. M. R. C. Horrell joined the staff as a junior laboratory technician. The year did not pass, however, without the loss of some member of the staff, for Mrs. V. Robinson, who for three years had been responsible for the clerical work of the laboratory, left at the end of September, and in the following month Miss D. Agass was appointed to this position.

The laboratory continues to carry out analytical work required by the Swansea County Borough Council, and the following table shows the numbers of samples examined for both the Cardiff and Swansea Authorities and the headings under which they were classified :—

For the City of Cardiff

Under the Food and Drugs Act	1,403
Under the Milk (Special Designation) Regulations ..	74
For the Port Health Authority	22
Under the Fertilisers and Feeding Stuffs Act	23
For the Public Health Department	251
For the City Surveyor's Department	12
For the Waterworks Department	125
From other sources	30
	1,940

For the County Borough of Swansea

Under the Food and Drugs Act	587
For the Public Health Department	171
For the Weights and Measures Department :—Under the Fertilisers and Feeding Stuffs Act	27
For the Borough Engineer's Department	1
For the Waterworks Department	11
For the Port Health Authority	4
	801
TOTAL	2,741

A separate report on the work carried out for the County Borough of Swansea is made to the Swansea Health Committee.

CHANGES IN FOOD AND DRUGS LEGISLATION

Food and Drugs Act, 1955

The Food and Drugs Act, 1955, which received the Royal Assent on the 22nd November, 1955, came into operation on the 1st January, 1956 when the Food and Drugs Act, 1938 and the amending Acts of 1950 and 1954, which it replaces, were repealed.

The main objects of the new provisions made operative by this Act may be summarised as follows :—

- (1) To provide further safeguards against the sale of food containing injurious or other undesirable ingredients, particularly those with cumulative effects, and against harmful technological processes.
- (2) To place the law regulating the composition, labelling and advertising of food on a permanent basis under the Food and Drugs Act instead of under Defence Regulations, and to extend the powers to make such regulations.
- (3) To provide fuller powers to secure that food is not contaminated in course of preparation, storage, distribution and sale.
- (4) To protect the general interests of consumers, employers and employees by setting up a Food Hygiene Advisory Council, and by giving government departments power to prosecute for offences.

The Food Hygiene Advisory Council will form part of the permanent administration of the Food and Drugs Act and the Ministers of Food and Health may refer to this Council for its consideration and advice any questions relating to food which come under the Food and Drugs Act. In particular, proposed regulations with regard to the labelling, marking and advertising of food, or to food hygiene, and new codes of practice will be submitted in draft for the consideration of the Council. The announcement that Alderman D. T. Williams, O.B.E., D.L., J.P., Chairman of the Health Committee, had been appointed a member of this Advisory Council afforded great pleasure and satisfaction to this section of the Public Health Department.

Other important changes effected by the new Act are as follows :—

Certain defences available where food and drugs are not of the nature, substance or quality demanded have been abolished ; the maximum penalties for offences have been increased and there is now no distinction in penalties between first and subsequent offences. The definition of "food" has been extended to include chewing gum, and provisions have been introduced with the object of preventing misuse of the description "cream" in relation to cream substitutes. An article made entirely from ingredients which occur in genuine cream, hitherto termed "artificial cream," is now given the more accurate and less misleading name "reconstituted cream" while "imitation cream" is defined as a substance made by emulsifying edible oil or fat with water, with or without other ingredients not specifically forbidden by regulation. It is clear that the new provisions prohibit the sale, for example, as "cream buns" of confectionery with a filling which looks like, but is not, genuine cream.

There are important changes in the procedure for sampling, and "analysis" now includes micro-biological assays. The increasing complexity of the analytical work now involved is recognised by the extension of the time permitted between sampling and the beginning of a prosecution from 28 days to two months (except in the case of milk), which period may, in special circumstances, be extended on a magistrate's order. In the past it has been necessary to obtain the consent of the Ministry of Food before proceedings could be taken for a false or misleading label relating to food, but the new Act only requires that not less than fourteen days' notice of the intention to institute such proceedings, together with a summary of the facts, shall be given to the Minister, who will give a certificate that such requirements have been complied with.

STATUTORY INSTRUMENTS

On the 1st January, 1956, the Regulations mentioned below, which are consequential upon the introduction of the 1955 Act, also came into operation. Briefly, they provide as follows :—

The Food Standards (Butter and Margarine) Regulations, 1955 prescribe standards for butter and margarine similar to those previously contained in the 1938 Act. They fix a maximum water content of 16 per cent for both butter and margarine and require that the fat content of margarine shall not contain more than 10 per cent of fat derived from milk.

The Labelling of Food (Amendment) Regulations, 1955 lay down requirements as to the labelling, marking and advertising of margarine and margarine cheese. These include a provision prohibiting the use in any label or advertisement relating to margarine or margarine cheese of names and pictorial devices referring to, or suggestive of, butter or anything connected with the dairy interest, and requiring that any claims on labels or in advertisements that margarine is made with or contains cream or milk must be accompanied by a declaration, in the prescribed manner, of the butter equivalence of the milk-fat so introduced.

The Mineral Oil in Food (Amendment) Regulations, 1955. Since chewing compounds are now deemed to be food, and as mineral oil in the form of so-called "micro-crystalline wax" (which is essentially paraffin-wax) is commonly used as an ingredient in such articles to increase plasticity and avoid tackiness, the Mineral Oil in Food Order was further amended by these regulations in order to permit the presence in chewing compounds of not more than 12·5 per cent of micro-crystalline wax. As a safeguard against possible risk to health from the process of chewing, a specification of purity for the wax is incorporated in the amending regulations.

The Food Hygiene Regulations, 1955 modify and very considerably extend the food hygiene provisions of the repealed Food and Drugs Act, 1938.

In a circular letter to Local Authorities and County Councils, the Ministry of Health has stressed that statutory regulations by themselves can never achieve the reduction in food-borne disease that everyone hopes to see, and that the application of the Food Hygiene Regulations will need continual supplementing with publicity and education in order that food handlers and the public may always have before them the importance of good food hygiene practice.

During the year, the prime responsibility for enforcing compositional requirements for flour, and for designated milk of the Channel Islands and South Devon breeds, was transferred from the Ministry of Agriculture, Fisheries and Food to Food and Drugs Authorities. These changes were effected by regulations made by the Minister of Agriculture, Fisheries and Food and the Minister of Health, acting jointly, under powers conferred on them by the Food and Drugs Act, 1955, which provide as follows :—

The Milk and Dairies (Channel Islands and South Devon Milk) Regulations, 1956, which came into operation on the 1st July, 1956, require that all milk for human consumption sold as Channel Islands, Jersey, Guernsey, or South Devon Milk shall contain not less than 4·0 per cent by weight of milk-fat.

The Flour (Composition) Regulations, 1956, came into force on the 30th September, 1956, and their general purport is :—

- (1) to make compulsory the addition to all flour other than flour containing the whole of the products derived from the milling of wheat, of not less than 235 milligrams and not more than 390 milligrams of calcium carbonate in the form of Creta Praeparata per 100 grams of flour, and

- (2) to require all flour to contain the undermentioned nutrients in not less than the following amounts :—

Iron	..	..	..	1.65 milligrams per 100 grams of flour
Vitamin B1	..	..	..	0.24 milligrams per 100 grams of flour
Nicotinic Acid or Nicotinamide	..	..	..	1.60 milligrams per 100 grams of flour

Should it be necessary to add nutrients to the flour in order to meet these requirements, as invariably will be the case when the flour is of less than 80 per cent extraction, the additions must be in a form authorised by the Regulations and they must conform to the standards of the British Pharmacopoeia or the British Pharmaceutical Codex.

These are essentially the requirements of the Flour Order, 1953, which was enforced and administered by the Ministry of Food and has now been revoked, the only differences being that whereas the 1953 Order prescribed addition of *Creta Praeparata* at the fixed rate of 14ozs. per 280lbs. of flour (or 312 milligrams per 100 grams. of flour), the 1956 Regulations allow a range for this ingredient equivalent to 14ozs. \pm 25 per cent per sack of 280 lbs., and that the use of Nicotinamide is now permitted as an alternative to Nicotinic Acid.

Two other changes in the legislation relating to foods that should be noted are concerned with metallic contamination :—

The Food Standards (Curry Powder) (Amendment) Regulations, 1956 has raised the maximum limit of lead that may be in Curry Powder from 10 to 20 parts per million, and

The Food Standards (Tomato Ketchup) (Amendment) Regulations, 1956 changes the limit for the amount of copper in Tomato Ketchup from 50 parts per million parts of dry solid matter to 20 parts per million parts of the sample as sold.

Drugs

An Addendum to the British Pharmacopoeia 1953 became operative on the 1st March, 1956. It contains 56 new monographs on drugs and medicinal preparations and amends 55 of the monographs in the 1953 "B.P." Among the changes that are of general interest are the following :—Soluble Aspirin Tablets have been made an official preparation ; water for general medicinal and pharmaceutical purposes may now be prepared from potable water by an ion-exchange demineralisation process as well as by distillation, the product must comply with additional requirements for purity and it has been designated "Purified Water" ; and the disintegration test for tablets has been replaced by a method that gives more consistent results.

SAMPLES TAKEN UNDER THE FOOD AND DRUGS ACT, 1955

The total number of samples of food and drugs examined during the year for the City of Cardiff was 1,403. The fact that a sample is obtained under the provisions of the Food and Drugs Act does not prevent action being taken by appropriate Authorities under other legal enactments, and therefore, when the samples were examined and reported upon, regard was given to all relevant legislation.

The nature of the various articles submitted, the number of each kind and the numbers that were adulterated or otherwise unsatisfactory are shown in the following table :—

Samples submitted under the Food and Drugs Act during 1956

Nature of Sample	Number examined	Number unsatisfactory
Baking powder	4	1
Beans, Haricot	1	1
Brandy	1	—
Bread	2	2
Bread, Starch-reduced	1	—
Butter	20	3
Cakes	3	2
Cake Mixture	2	—
Cheese spread	3	—
Cherries, Glacé	3	1
Chicken fat	1	1
Cocoa	8	—
Coconut, Desiccated	2	—
Coffee	7	—
Coffee extract, Dry	1	—
Condiment (Vinegar substitute)	3	—
Cooking fat	2	—
Corned beef	1	—
Cream	4	—
Cream, Canned	4	3
Cream, Bottled	1	—
Currants	3	—
Curry Powder	2	—
Custard powder	3	—
Drugs and Medicinal Preparations :—		
Almond oil	2	—
Aspirin tablets	4	—
Bicarbonate of Soda	3	—
Blackcurrant Juice Drink (with de- clared Vitimin C content)	1	—
Cod Liver oil	1	—
Epsom Salts	1	—
Glauber's salts	2	—
Glycerine	2	—
Halibut oil capsules	1	—
Iodine, tincture of	3	—
Malt extract and honey	1	—
Nicotinamide tablets	1	—
Orange Juice, Concentrated (with de- clared Vitamin C content)	3	2
Phenacetin tablets	1	—
Saccharin tablets	2	—
Vitamin C tablets	3	—
Vitamin capsules	2	—
Vitamin tonic	1	—
Witch hazel (distilled)	3	—
Fish paste	3	—
Flour, self-raising	2	—
Gelatine	3	—
Gin	2	—
Golden raising powder	1	—
Ground nut oil	1	—
Herring roes, Canned	2	—
Ice cream	16	—
Ice-lolly	2	—
Jam	8	—
Lard	30	12
Laver bread	1	—
Lemon juice	2	1
Lentils	1	—
Margarine	18	1
Marzipan	8	1
Milk	968	84
Milk, Channel Islands	110	6
Milk, appeal-to-cow samples	6	5

Samples submitted under the Food and Drugs Act during 1956—continued

Nature of Sample	Number examined	Number unsatisfactory
Milk, condensed	3	1
Milk powder	1	1
Milk tablets	1	—
Mince-meat	3	—
Mustard, compound	2	—
Oranges, canned	1	—
Pastry mixture	2	—
Peaches, canned	1	—
Pepper	2	—
Pie filling ingredients	1	—
Prunes	4	1
Pudding, Christmas	2	—
Raisins	3	—
Rennet, essence of	1	—
Rice	3	1
Rum	1	—
Sausages, Vienna	1	1
Soft Drinks	16	—
Soup powder	5	—
Suet, shredded	4	2
Sugar, icing	2	—
Sultanas	3	—
Sweets	2	—
Table jelly tablets	8	—
Tea	16	—
Tomato juice, canned	3	2
Tomato sauce	3	—
Trifle ingredients	1	—
Vinegar	3	—
Whisky	2	—
	1,403	135

Of the total of 1,403 samples submitted under the Food and Drugs Act, 135 or 9.6 per cent were reported upon adversely. In no instance, however, was it found necessary to institute legal proceedings. In 1955 the proportion of unsatisfactory samples was 8.4 per cent and in 1954 it was 9.9 per cent.

Milk

The total number of milk samples submitted under the Food and Drugs Act during the year was 1,084. Of these 1,078 were taken in the usual way by the Sampling Officers from roundsmen, at wholesale dairies, and at schools, hospitals and other institutions while six were appeal-to-cow samples. The adulterated and otherwise unsatisfactory samples are classified in the table below.

Ordinary Milk—968 samples

Number deficient in fat only	64 — 6.6%
Number containing added water only	17 — 1.7%
Number deficient in fat and containing added water	3 — 0.3%

Channel Islands Milk—110 samples

Number containing less than 4.0% of fat	5 — 4.5%
Number containing added water	1 — 0.9%

Genuine Milk of poor quality

Number of samples of ordinary milk that contained less than 8.5% of non-fatty solids but showed no evidence of the presence of added water by the freezing-point test	126 — 13.0%
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The freezing-point test confirmed the presence of added water in 20 samples of ordinary milk (i.e. all milk samples except Channel Islands Milk and appeal-to-cow samples) that contained less than the legal presumptive minimum of 8.5 per cent of non-fatty solids and in one sample of Channel Islands milk that contained 8.54 per cent of non-fatty solids. In all these cases however, the amounts of added water were quite small and suggested careless draining of receptacles or plant rather than deliberate adulteration and the vendors were cautioned by the Chief Public Health Inspector.

Most of the samples that contained less than the legal presumptive minimum of 3.0 per cent of fat were taken from supplies of raw milk delivered to dairies in the city and were described on the labels attached to the churns as morning milk. In many cases they were accompanied by samples of afternoon milk from the same cows and invariably these were rich in fat so that the fat content of the whole consignment averaged more than 3 per cent.

When there is a considerably longer interval between the afternoon milking and the next morning milking than there is between the morning and afternoon milkings of the same cows, it is generally found that the afternoon milk is rich in fat (and small in quantity) while the morning milk is low in fat content (and large in quantity). This is the most common cause of the fat content of genuine milk falling below 3 per cent, and it is particularly liable to occur in the Spring when the average fat content of milk is at its lowest during the year.

One hundred and twenty-six samples of milk contained less than the legal presumptive minimum of 8.5 per cent of non-fatty solids but had normal freezing points, thus indicating that they had not been adulterated by the addition of water but were naturally poor in solids-not-fat. This represents 13 per cent of the samples of ordinary milk. Eighty of these naturally sub-standard samples, i.e. nearly two-thirds of them, were obtained during the first four months of the year, and the proportion of such samples in recent years has been as follows:—

Year	..	1953	1954	1955	1956
Percentage	..	8.4	9.7	11.1	13.0

These figures strongly suggest that in this area the proportion of milk that is naturally sub-standard as regards non-fatty solids is gradually increasing, and the fact that most of such examples are obtained in the late winter and early spring months suggests that this deterioration in the compositional quality of milk is due in a large measure to producers failing to maintain adequately balanced rations for the herd at this time of the year.

In those cases where milk was found to be of exceptionally poor quality with no evidence of adulteration, the producers were recommended to seek advice from the National Agricultural Advisory Service. In two instances during the year where this advice was welcomed and acted upon, subsequent samples showed vast improvement in composition. In the course of investigating one of these cases six appeal-to-cow samples were taken, five of which were low in fat content, one sample containing only 1.96 per cent of fat while another contained 2.20 per cent of fat and 7.93 per cent of non-fatty solids, the average fat content of the six samples being only 2.51 per cent. When further samples were taken some two months after the feeding had been changed as advised by the N.A.A.S., the fat contents of the samples ranged from 3.18 to 4.01 per cent, with an average of 3.63 per cent.

Channel Islands and South Devon Milk.—From the 1st July, 1956, Food and Drugs Authorities became responsible for enforcing the compositional requirements for Channel Islands Milk and South Devon Milk instead of the Ministry of Food as hitherto. As already indicated, milk for human consumption sold under these special designations, or under the designations Jersey Milk and Guernsey Milk, must be the produce of cows of the breed indicated by the name and must contain not less than 4.0 per cent of milk-fat.

During the year 110 samples of Channel Islands Milk were examined, five of which were found to contain less than 4 per cent of fat, the amounts present being 3.15 per cent, 3.50 per cent, 3.70 per cent, 3.82 per cent and 3.85 per cent. The samples that contained 3.15 per cent and 3.85 per cent of fat were accompanied by other samples of Channel Islands Milk and in each case it was found that the average fat content of the consignment exceeded 4.0 per cent. The vendors of the other three samples that were deficient in fat were cautioned as also was the vendor of another sample that was found to contain a small amount of extraneous water.

Average Composition of Milk Samples.—The average composition of all the milk samples submitted during the year is given in the table below. The average composition of the Channel Islands Milk and of the “ordinary” milk samples (i.e. all samples other than Channel Islands Milk) is also shown.

Average Composition of Milk Samples, 1956

Variety	Number of Samples	Fat per cent	Non-fatty solids per cent	Total solids per cent
Channel Islands Milk ..	110	4.62	9.06	13.68
Other Milk samples ..	974	3.50	8.64	12.14
All Milk samples ..	1,084	3.62	8.68	12.30

It will be observed that the average composition of Channel Islands Milk is much superior to that of “ordinary” milk and the results from this variety are in accordance with the general finding that milk that contains a high percentage of fat also contains a high percentage of non-fatty solids.

Attention has been drawn in previous reports to the steady decline in the average composition of the samples of milk other than Channel Islands milk that has occurred since the year 1935. The annual averages for such milk for the last 22 years are given in the following table :—

Average Composition of Milk Samples (excluding Channel Islands Milk) 1935–1956

Year	Fat, per cent	Non-fatty solids per cent	Total solids per cent
1935	3.81	8.83	12.64
1936	3.77	8.74	12.51
1937	3.81	8.75	12.56
1938	3.67	8.74	12.41
1939	3.66	8.78	12.44
1940	3.68	8.64	12.32
1941	3.61	8.67	12.28
1942	3.64	8.67	12.31
1943	3.62	8.76	12.38
1944	3.65	8.74	12.39
1945	3.59	8.64	12.23
1946	3.65	8.67	12.32
1947	3.59	8.73	12.32
1948	3.55	8.70	12.25
1949	3.57	8.67	12.24
1950	3.55	8.74	12.29
1951	3.55	8.67	12.22
1952	3.51	8.69	12.20
1953	3.48	8.69	12.17
1954	3.52	8.67	12.19
1955	3.48	8.64	12.12
1956	3.50	8.64	12.14

It will be observed that the average total solids were only very slightly higher than in 1955 when they were the lowest recorded, the increase being due to a very slightly higher average fat content. There was no alteration in the average solids-not-fat content, and attention has already been drawn to the steadily increasing proportion of samples that naturally contain less than 8·5 per cent of non-fatty solids.

In 1951, a Working Party was appointed by the Government "to examine the present structure of producers' prices for Milk and to advise whether it is desirable and practicable to make revisions which would promote an improvement in the composition and quality of milk sold off farms in the United Kingdom." Their report was published in 1953 when the Working Party came to the conclusion that—

"there has been some deterioration in the composition of milk in England and Wales over the past 30 years and that the decline in solids-not-fat has been more marked than that in fat. We consider, however, that there is also evidence to suggest that the decline has been arrested, at least in some areas. Nevertheless, *milk of poor compositional quality is still being produced throughout the year by too many producers.* In the early spring and occasionally at other seasons, substantial quantities of milk in many parts of England and Wales fall below the presumptive minimum standards. *There is therefore no cause to be satisfied with the present level of milk quality in England and Wales and every reason for taking steps to improve it.*"

For arresting this decline, the Working Party recommended that :—

- (a) Producers and distributors co-operate, with the assistance of Government Departments and Research Institutes, in an effort to improve the average butter-fat and solids-not-fat content of milk.
- (b) Such an improvement be an integral part of the national dairy policy.
- (c) This work be undertaken by the Joint Committee for the Control of Milk Quality.

The report outlined a procedure to be adopted to deal with ex-farm milk at or near the presumptive minimum standards for butter-fat and/or solids-not-fat. The ultimate sanction suggested was the power to cancel the contract of producers who persistently sell such milk.

The Joint Committee for the Control of Milk Quality was established in 1948 with the object of co-ordinating the work of Milk Quality Control within the industry. The Committee consists of representatives of the Milk Marketing Board, The National Farmers' Union, the Buyers of Milk and the Ministry of Agriculture, Fisheries and Food, and it has supervised the scheme for improving the *keeping quality* of ex-farm milk supplies. The Minister of Agriculture, Fisheries and Food invited the Committee to formulate and operate a scheme for supervising the *compositional quality* of ex-farm milk on the lines suggested by the Working Party. The Committee accepted this invitation and its proposals, which are outlined below, were brought into operation on the 1st October, 1956.

Scheme of the Joint Milk Quality Control Committee for improving the Compositional Quality of Milk

The scheme aims at selecting for special attention producers consigning milk of persistently low compositional quality. This follows the recommendation by the Working Party on Quality Milk Production that efforts to secure improvement should be concentrated, in the first place, on those herds that are producing milk of the lowest quality.

For the first twelve months, i.e., up to the 30th September, 1957, all producers of milk may be considered to be on trial. During this basic period the milk from each producer received at the buyer's premises will be tested for milk-fat and solids-not-fat content at least once in each calendar month. Although the quality of the supply will be judged on the annual average figures and not on the results of an individual sample, the producer will be notified by the buyer on each occasion when the milk-fat and/or the solids-not-fat content of any sample fall below the presumptive legal standards of 3·0 per cent and 8·5 per cent respectively.

At the end of the basic period the simple average of the results for the twelve months for each producer will be calculated by the buyer, and all producers will then be classified as satisfactory or unsatisfactory. The unsatisfactory producers will be those who have supplied milk with an annual average milk-fat content of less than 3·3 per cent or an annual average solids-not-fat content of less than 8·5 per cent and they will be reported immediately to the Milk Marketing Board. It is estimated that between 15,000 and 20,000 producers will be classed as unsatisfactory and the Milk Marketing Board will divide those reported to them into two categories :—

Category 1.—This will consist of those producers supplying the worst milk and whose supplies persistently fail to reach the presumptive legal standards. These producers will receive a letter pointing out that their supplies have been very unsatisfactory and placing them on probation for the next year, and it will warn them that if the quality of the supply, as shown by the annual average of the monthly tests during this probationary year, does not improve, cancellation of their contracts for the sale of milk will be considered. These producers will be visited by representatives of the buyer and/or the Milk Marketing Board, who will, if necessary, recommend the producer to apply to the National Agricultural Advisory Service for further assistance.

Category 2.—This will comprise a far larger number of producers whose supplies are slightly better than those in the first category. These producers will receive a warning letter drawing their attention to the fact that their supplies have been of unsatisfactory composition or quality during the year and dangerously near to the level at which cancellation of contract will have to be considered. The letter will suggest that the producer should seek advice from the buyer's fieldsman, the regional staff of the Milk Marketing Board or the National Agricultural Advisory Service.

The standards to be used in selecting these categories will be agreed between the Milk Marketing Board and the Joint Quality Control Committee.

This scheme is only a voluntary one and is confined to co-operating buyers. Testing will be carried out by those buyers of milk who have given an assurance that their methods of sampling and testing are in accordance with the standard procedures laid down by the British Standards Institution. Where buyers are unable to comply with these requirements, the Milk Marketing Board will arrange for samples to be tested at an approved laboratory.

Investigations have shown that the main factors involved in low compositional quality are poor breeding and unbalanced feeding of the cows, and two years are available in which the producer may obtain and act on expert advice. If breeding is responsible for the poor quality of the milk it may take more than two years to bring about improvement, and in such cases the only cure may be for the farmer to buy some cows of high milk-fat potential and to get rid of the cows that are producing milk of low-fat content, i.e., cows averaging less than 3·3 per cent of fat and whose milk is very unlikely to have a satisfactory solids-not-fat content. Poor feeding of the herd during the autumn may result in very unsatisfactory solids-not-fat levels during the winter and it is essential that the required quantities of properly balanced nutrients should be fed at all periods of the year.

The effectiveness of this scheme will depend very largely on the extent to which buyers participate in it. Obviously all producers ought to be covered by it. The policy is a long term one, but the results will be awaited with interest.

Articles other than Milk

Three hundred and nineteen samples other than milk were submitted during the year. They covered a wide range of articles and particulars of the forty samples (12·5 per cent) that were reported upon adversely are tabulated as follows.

Unsatisfactory Samples of Articles other than Milk

Article	Nature of Adulteration or Irregularity
Baking powder	Contained 7.5% of available carbon dioxide instead of at least 8.0%.
Beans, Haricot	Infested with live insects.
Bread, Sliced brown (wrapped)	Mouldy. Unfit for human consumption.
Bread (milk loaf)	The milk bread dough had become mixed with some brown bread dough causing brown patches and streaks in the loaf.
Butter (3 samples)	Contained 16.3%, 16.3%, and 16.5% of water respectively.
Cake	Contaminated with rodent excreta.
Cake	The covering of marzipan was fermenting.
Cherries, Glacé	The term "glucose" was used to describe the product known commercially as "liquid glucose" which consists mainly of dextrins and contains less than one-sixth of its weight of dextrose, i.e., glucose as known to the housewife.
Chicken fat	Rancid. Unfit for human consumption.
Cream, sterilised (3 samples)	Not of merchantable quality, being abnormally acid, thick and lumpy, with yellow-brown deposit on lid and at bottom of can, and of objectionable bitter taste.
Lard (12 samples)	Rancid (oxidative rancidity). Not of edible quality.
Lemon juice	Fermenting. Unfit for use.
Margarine	Contained 16.7% of water.
Marzipan	Contained only 20% of ground almonds instead of at least 25%.
Condensed milk, sweetened ..	In a deteriorated condition. Contained numerous reddish "buttons" and mould growth.
Milk powder, modified	The powder had a distinct tallowy taste and the fat showed evidence of marked oxidative rancidity.
Orange juice, (concentrated) (2 samples)	Contained 25 mgm. of Ascorbic Acid (Vitamin C) per fluid ounce instead of not less than 60 mgm. per fluid ounce as declared on the label.
Prunes	Fermenting and unmerchantable in appearance. Unfit for human consumption.
Rice	Contaminated with rodent excreta.
Suet, shredded (2 samples) ..	Contained 77.8% and 80.7% of fat instead of at least 83%.
Tomato juice, canned	Labelling irregularity. The major ingredient was described on the label as "Tomatoes" whereas it should have been declared as "Tomato juice."
Tomato juice, canned	Excessive contamination with tin and copper, and the tinned interior of the can was coated with a loosely-adhering grey-black deposit of copper oxide which doubtless was deposited from the tomato juice originally as metallic copper.
Vienna sausages	Pre-packed but the label did not bear a statement of the ingredients as required by the labelling of Food Order.

The table includes examples of irregularities in the labelling of pre-packed articles of food, contraventions of food standards, an instance of excessive metallic contamination of food, two of "filth" in food and several cases of deterioration during storage due to a variety of causes, and they emphasise the wisdom of the recent decision of the Health Committee of the Association of Municipal Corporations "that each local authority must retain its right to sample food and drugs offered for sale in its area, and that sampling should be frequent and as near as possible to the stage at which goods reach the consumer, thus ensuring that deterioration or contamination taking place in them while held in stock by wholesaler or retailer, will not escape notice."

Suitable action was taken by the Chief Public Health Inspector in respect of these unsatisfactory samples. Brief reference to some of these, and to certain other articles is made below.

Butter and Margarine.—The Food Standards (Butter and Margarine) Regulations require that butter and margarine shall not contain more than 16 per cent of water. Three samples of butter and one of margarine contained water somewhat in excess of this limit. The blenders of the samples of butter and the manufacturers of the margarine were cautioned by letter.

There appears to be an increasing tendency for butter and margarine to contain the maximum amount of water permitted by law. This applies to both home-produced and imported butter, and blenders who use a brine solution for salting butter that already contains the maximum amount of water must see that the product as sold does not exceed the legal limit. It may be advisable in some instances to change to dry salting.

Cheese Products.—In 1947, the Ministry of Food appointed a Food Standards Committee to review the composition of foods and to recommend, where it was considered advisable, standards based on quality and nutritional value. Upon representations being made to the Committee by cheese processors and others, consideration was given to processed cheese and cheese spread, and in 1949 this Committee issued a report in which the following standards of composition for these articles were recommended :—

		<i>Minimum butterfat content in the dry matter</i>	<i>Maximum moisture content</i>
Processed Cheese	.. ..	48%	42%
Processed Cheese of the Gruyère and Emmenthal varieties	.. ..	45%	45%
Cheese spread	.. ..	45%	48%

Following the publication of this report, a number of representations were received which indicated a divergence of opinion within the trade, and the results of analysis of samples taken since 1949 have shown that the composition of many brands of these products, particularly those of continental origin, was not in accordance with these recommendations (vide Annual Report upon the work of the Cardiff Public Health Department for 1955, pp. 89–91). During this period the Town Clerk brought a number of such instances to the notice of the Ministry of Food and he was informed that they would be brought to the notice of the Food Standards Committee. On the 29th November, 1956, the Ministry of Agriculture, Fisheries and Food issued a Second Report by the Food Standards Committee on Processed Cheese and Cheese Spread which takes full account of the representations made to the Ministry and of views that were expressed in subsequent consultations.

In this second report it is pointed out that the processed cheese and spread industry was a relatively new one in this country before the war, but it has developed and expanded considerably during recent years, and in 1955 domestic production amounted to 26,000 tons. As processed cheese is bought as an alternative form of cheese, it was the Committee's view that it should have a nutritive value comparable with that of unprocessed cheese. Since the further processing to which ordinary cheese is subjected offers opportunity for the inclusion of additional water and the use of cheese having a low fat content, the Committee considers that the consumer needs protection against the sale of inferior products.

The standards of composition now recommended are as follows :—

		<i>Minimum butterfat content</i>	<i>Maximum moisture content</i>
Processed Cheddar or Cheshire cheese		48% in dry matter	42%
Processed cheese	.. ..	45% in dry matter	45%
Cheese spread	.. ..	20% in product as sold.	60%

Other recommendations include: (1) That the name "processed cheese" shall be applied only to the product obtained by heat-treating cheese with or without the use of emulsifying salts. The fat content should be wholly butterfat derived from cheese and the only other ingredients should be the emulsifying salts and any water or colouring matter it is considered necessary to add during processing; (2) Cheese may contain, in addition to cheese, other dairy products such as butter and skimmed-milk, but it is considered that the consumer would not expect to find any fat other than butterfat present; (3) The processed cheese or cheese spread that forms the basis of flavoured products such as those containing small quantities of tomato or celery flavouring should conform to the appropriate standard, and in the case of mixtures where the additional ingredient is significant enough to justify inclusion in the description, e.g., "Cheese and Ham Spread," the processed cheese or cheese spread constituent should conform to the appropriate standard; (4) The ingredients used in the manufacture of cheese spread should be declared on the label and in the case of flavoured products the flavouring ingredients should be included in this description.

The three samples of cheese spread examined were received during the second quarter of the year (i.e. before the new recommendations were published) and they were substantially in accordance with the original recommendations of the Food Standards Committee for this product. They satisfied also the less stringent new recommendations. The ingredients were declared on the labels, their butter-fat contents ranged from 25.3 to 27.2 per cent and their moisture contents from 45.2 to 48.9 per cent.

Ice Cream.—Ice cream is required to contain not less than 5 per cent of fat, 7.5 per cent of milk solids other than fat, and 10 per cent of sugar. During the year under review, sixteen samples of ice-cream were submitted for chemical analysis and all of them were found to satisfy these requirements. In 1955, sixteen samples of this product also were submitted and one was deficient in both fat and milk solids other than fat. This is the first year since 1944, when the manufacture of ice-cream was resumed after the war, that all the samples submitted have complied with the standard, and the average composition was higher than in any previous year. The fat contents of the samples examined in 1956 ranged from 5.4 to 15.0 per cent, the average being 10.8 per cent, and the total solids ranged from 26.8 to 43.2 per cent, with an average of 36.2 per cent.

Lard.—The samples of lard that were reported upon adversely were 12 of 20 samples from a large consignment of one brand that had been the subject of numerous complaints. The consignment appeared to be a mixed one, for 8 of the 20 samples were satisfactory but the rest were rancid and not of edible quality, the worst of them having peroxide values between 40 and 50 and giving red colours of more than 30 Lovibond units in the Kreis test for oxidative rancidity, while the normal samples had peroxide values between 5 and 8.5 and gave red colours between 7 and 8.7 Lovibond units in the Kreis test. I have been informed by the Chief Public Health Inspector that the whole consignment was returned to the suppliers for use for industrial purposes, and that the Local Authority for the area concerned was notified accordingly.

Labelling of Food.—The Labelling of Food Order requires, in general, that labels on pre-packed foods must bear the appropriate designation of each ingredient or constituent, and these must be specified in descending order of the proportion in which they were used. For the purpose of this requirement, "appropriate designation" means a name or description which shall indicate to a prospective purchaser the true nature of the ingredient or constituent to which it is applied.

One of the ingredients of a sample of pre-packed Glacé Cherries was described as "glucose" whereas analysis showed that the substance used was the article known commercially as "liquid glucose." Pure glucose is a white powder and it is frequently purchased by the housewife for infant feeding and other purposes, whereas "liquid glucose" is a syrup prepared by the hydrolysis of starch and consists principally of

dextrins, less than one-sixth of its weight being dextrose, i.e., "glucose" as known to the housewife. These two descriptions, therefore, are not synonymous and the constituent referred to as glucose on the label should have been described as "liquid glucose." The use of the term "glucose" for the latter product does not "indicate to a prospective purchaser the true nature of the ingredient or constituent to which it is applied." This sample also contained a sulphite preservative, the presence of which was not declared.

The major ingredient of a sample of Canned Tomato Juice was tomato juice and not tomatoes as indicated on the label, and the label on pre-packed Vienna Sausages did not bear a statement of the ingredients as required by the Order.

The respective packers were informed of these irregularities and in each case they expressed concern that their labels were not correct.

Food Hygiene.—The extraneous matter embedded in a Sandwich Cake and that was present in a sample of Rice proved to be rodent excreta. The obligation on food manufacturers and retailers to prevent such objectionable contamination is a very high one and the makers of the cake and the vendor of the rice were given strong warnings and they were advised upon rodent control. A sample of Haricot Beans was heavily infested with live insects and the stock was destroyed.

Sausages.—There are now no statutory minimum standards of composition for sausages, but prior to 1st March, 1953, they were the subject of a Food Control Order which regulated their composition and price. The minimum meat content for beef sausages was 50 per cent and for pork sausages, 65 per cent, and since more meat is now available for manufacturing purposes it is generally considered that sausages ought not to contain less meat than during the period of control.

The Minister of Agriculture, Fisheries and Food has kept this matter of minimum standards for sausages constantly under review and recently he invited the Food Standards Committee of the Ministry to advise whether statutory standards or some other form of compositional control is now needed for sausages. The Food Standards Committee reported upon this matter in May, 1956, and the Minister of Agriculture, Fisheries and Food, the Minister of Health and the Secretary of State for Scotland approved the report for publication. It is pointed out that sausages are an important food, the national expenditure on them being of the order of £80-£90 million a year; they are eaten as a main dish, their meat content accounts for at least 10 per cent of the total weight of carcase meat consumed, and they contribute to the national diet about half as much animal protein as, for example, the total supplies of fish or eggs. The report is a very carefully considered and interesting one, and the following paragraphs from the Introduction summarise the position at the time of the inquiry, and this unsatisfactory state of affairs still exists and is likely to continue until minimum legal standards are introduced.

"The composition of sausages was controlled under Defence Regulations throughout the war until March, 1953. When meat products were de-controlled the then Minister of Food decided not to impose standards of composition in order to give the public an opportunity to buy, at competitive prices, a wide variety of sausages to satisfy local and personal preferences.

Many food and drugs authorities have continued to use the minimum levels of meat content previously in force (65 per cent for pork sausages and 50 per cent for beef sausages) as the criteria for an acceptable sausage, and successful prosecutions have been made on this basis. But in other localities this may not have been done and recent High Court cases have cast doubt on the status of these limits. Thus, manufacturers, particularly if distributing over a wide area, have been in doubt as to

what level of meat content would prove legally acceptable. In practice many may have felt obliged to regard the provisions of the control Order as setting *de facto* limits to the kind of sausage they could produce. This is borne out by the evidence from samples analysed by public analysts that the bulk of sausages have a meat content just above the control Order levels. The suggestion made by the Minister of Food in 1954 that traders could safeguard themselves against the risk of prosecution by declaring the meat content of their sausages on a label or ticket has not been followed up by the trade.

On the other hand, local enforcing authorities have felt some reluctance to institute proceedings on the meat content of sausages in view of the doubtful legal position. The prevailing uncertainty has been emphasised on more than one occasion by the Lord Chief Justice, who has pointed out that, until Ministers lay down a statutory definition of what a sausage is, the question will continue to be disputed in the Courts."

After consulting some 36 organisations representing all branches of the sausage trade and local authority associations and related bodies concerned with the enforcement of food and drugs legislation in the United Kingdom, the Committee concluded that statutory control is needed, and having regard to the experiences mentioned above it recommended that regulations should be made laying down standards for sausages. The standards proposed are :—

- (a) For sausages made wholly or mainly with pork—a minimum meat content of 65 per cent.
- (b) For all other meat sausages—a minimum meat content of 50 per cent.
- (c) The proportion of fat in the meat used shall not exceed 50 per cent of the total meat content.

The Report also recommends that the types of meat used should be limited to pork, beef, veal, mutton, lamb, bacon, ham, poultry, game, rabbit, hare, venison and edible offals. A majority of the Committee recommended that with "pork sausage" and "beef sausage" at least four-fifths of the total meat content should be pork or beef as the case may be, but a minority considered that these descriptions should be permitted only where the meat content consists wholly of the named meat.

Emulsifying and Stabilising Agents.—In October, 1956, the Minister of Agriculture, Fisheries and Food, the Minister of Health, and the Secretary of State for Scotland approved for publication a comprehensive Report by the Preservatives Sub-Committee of the Food Standards Committee (under the chairmanship of Sir Charles Dodds, M.V.O., M.D., D.Sc., F.R.S.) on Emulsifying and Stabilising Agents. These are substances capable of facilitating the uniform dispersion of oils and fats in aqueous medium (or vice versa), and by stabilising such emulsion. The substances brought to the attention of the Sub-Committee as in use, or capable of being used, for these purposes covered a wide range from common substance such as starches and gums to highly complex synthetic chemicals such as the polyoxyethylene compounds.

The general view of the Sub-Committee was that "it is not in the public interest for chemical substances to be added to food unless there is adequate evidence that their use in food will not affect adversely the health of the consumer and a strong case can be made out that their use in food would have advantages, economically, technically or otherwise, likely to benefit the consumer." They considered that the addition of these agents to food should be subject to statutory control and recommend that this be exercised by prescribing a list of permitted substances. They name some 20 substances, chiefly natural

constituents of certain foods (e.g. agar, alginates, pectin, lecithin, albumen and gelatin) and others that are common ingredients apart from their possible use as emulsifying or stabilising agents (e.g. hydrolysed protein and modified starch), as not requiring legislation, and they recommend that for the present official approval should be restricted to the following substances :—

superglycerinated fats	methyl ethyl cellulose
synthetic lecithin	sodium carboxymethyl cellulose
propyleneglycol alginate	stearyl tartrate
propyleneglycol stearate	monostearin sodium sulphoacetate
methyl cellulose	sorbitan esters of fatty acids
diacetyl tartaric acid esters of super-glycerinated fats	

They also recommend that specifications of composition and purity should be prescribed for each of the permitted substances.

Before deciding what action should be taken on the Sub-Committee's recommendations, the Ministers concerned will consider any representations made by interested parties.

ATMOSPHERIC POLLUTION

"Air pollution . . . needs to be combated with the same conviction and energy as were applied one hundred years ago in securing pure water."

—Report of the Beaver Committee on Air Pollution, 1954

"The Investigation of Atmospheric Pollution" is a scheme in which Local Authorities, Government Departments, industrial organisations and others, co-operate in the study of the pollution of the atmosphere and its prevention. A short account of the development of this scheme was given in the Annual Report for 1955, pp. 93 and 94.

Though the object of the "Investigation of Atmospheric Pollution" is to obtain exact scientific information, its ultimate purpose is to give assistance to public authorities and to industry in dealing with the smoke problem and with public health questions, and to this end a Standing Conference of Co-operating Bodies has been established to which all who are taking part in the work or who are contributing to the research funds are entitled to send representatives. In this way, the closest possible contact is made between the Department, as responsible for the direction of the work, and the representatives of Local Authorities and Industry, as responsible for the practical application of the results. Members of the Atmospheric Pollution Research Committee attend meetings of the Standing Conference, two of which are held annually. Alderman C. A. Bence, M.R.C.S., L.R.C.P., and Dr. W. Powell Phillips, O.B.E., Medical Officer of Health, represent Cardiff on the Standing Conference of Co-operating Bodies.

The Cardiff City Council has co-operated in this scheme since 1926, when a standard Deposit Gauge was fixed in the Priory Gardens, but this site proved to be unsuitable and on the 1st January, 1928, the gauge was removed to the roof of the City Hall where it is still situated. In 1932 a Lead Peroxide "Candle" also was set up at this site for the purpose of measuring sulphur pollution.

The deposit gauge is used to measure the rate at which atmospheric pollution is deposited and, by inference, the rate at which it is emitted into the air. It consists essentially of a glass bowl, 12 inches in diameter, which drains into a bottle of about 10 litres capacity, and after it has been exposed on the site for one calendar month the extent of pollution by deposited matter is determined by analysis of the solid and liquid fractions collected. The full examination of the deposit includes the determination of the volume of liquid (rain) collected, its pH value, and its content of calcium, chloride and sulphate ions and of total dissolved matter; the undissolved matter is weighed and analysed for ash, "tar" (i.e., material soluble in carbon disulphide), and other combustible matter.

The lead peroxide candle serves for the measurement of sulphur gases in the air. One of the most deleterious products of the combustion of fuels is sulphur present in the form of its oxides, mainly sulphur dioxide. Sulphur dioxide is discharged into the atmosphere with the chimney gases wherever fuel in the form of coal, coke, fuel oil or unpurified gases is burnt. A relatively small proportion of the sulphur contained in solid fuels is retained in the ashes, but the bulk of it goes into the atmosphere. It was estimated by the Beaver Committee on Air Pollution that in Great Britain in the year 1953, no less than 5·2 million tons of sulphur dioxide were discharged into the atmosphere from the consumption of coal, coke and oil.

In the lead peroxide method of measuring sulphur dioxide, a small porcelain cylinder or "candle" coated with lead peroxide is exposed to the air for one month and then analysed for sulphates, since the sulphur dioxide taken up from the air is oxidised by the lead peroxide to sulphate. To protect the candle from rain and external damage during exposure it is housed in a louvered box. The results are expressed in empirical units, viz., milligrams of sulphur trioxide per day per 100 square centimetres of standard lead peroxide exposed in the standard apparatus; they thus provide comparative data only, but they do afford a means of comparing the intensity of pollution of the air by sulphur at different places and times and they give a useful indication of the relative effects of polluted atmosphere upon buildings, stonework, metals and paints. It should be noted, however, that even if visible smoke and grit emission from chimneys are prohibited and smokeless zones become more common, sulphur gases will still be released into the atmosphere wherever coal, smokeless solid fuel or oil is burned, and it is these invisible gases which cause such damage to man, property and vegetation.

The results obtained at the City Hall site are forwarded by the Health Department each month to the Superintendent of Observations at the Fuel Research Station, London, and they form part of the nation-wide survey made by the Department of Scientific and Industrial Research. Long-term records are particularly useful, and observations made at an approved site should be continued for they provide valuable information as to changes in pollution in relation to industrial and other developments in the area. In addition, whether the site is in a clean or a heavily polluted area, the results are invaluable to medical and other investigators studying the effects of pollution.

Cardiff Observations for 1956.—The results of the monthly analyses covering the year under review are given in the table overleaf.

ROOF OF CITY HALL, CARDIFF. MONTHLY RESULTS, 1956
Deposited Matter—tons per square mile

Type of Deposit	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Total Undissolved Matter ..	8.39	6.66	13.52	11.70	5.53	6.14	5.70	4.22	8.32	8.51	5.92	11.87
“Tar” ..	0.20	0.19	0.16	0.18	0.12	0.16	0.32	0.05	0.31	0.29	0.44	0.32
Other combustible matter	2.99	2.66	3.71	3.87	2.36	2.51	1.72	1.76	2.22	3.05	1.70	3.24
Ash ..	5.20	3.81	9.65	7.65	3.05	3.47	3.66	2.41	5.79	5.17	3.78	8.31
Total Dissolved Matter ..	7.95	4.24	6.22	3.81	3.07	4.54	5.12	8.08	7.34	5.59	5.00	12.28
Calcium, Ca + ..	1.01	0.66	1.10	0.80	0.37	0.59	0.73	0.78	0.92	0.68	0.66	1.09
Chlorides, Cl' ..	2.24	0.46	0.66	0.14	0.22	0.66	0.42	1.49	0.93	0.58	1.09	2.61
Sulphates, SO ₄ ” ..	2.86	1.46	2.19	1.75	0.93	1.46	1.44	2.03	2.70	1.93	1.61	2.70
Total Solid Matter Deposited	16.34	10.90	19.74	15.51	8.60	10.68	10.82	12.30	15.66	14.10	10.92	24.15
Rainfall, in inches ..	4.65	0.24	1.01	1.87	1.21	2.55	3.53	7.41	4.92	2.33	1.34	4.77
pH value of filtrate from gauge	5.7	6.0	6.0	5.9	6.7	6.9	6.3	5.8	6.2	6.5	6.3	5.7
Sulphur Dioxide expressed as milligrams SO ₃ per 100 sq. cms. lead peroxide per day	1.30	1.77	1.11	1.00	0.48	0.46	0.42	0.41	0.58	0.91	1.21	1.16

Deposited Matter.—It will be observed from this table that widely differing quantities are often collected in the deposit gauge in successive months. This is due to the fact that the rate of deposition of pollution in any one specified locality depends not only on the fuel consumed in that locality but also on rainfall, the strength and direction of the wind and other variable meteorological factors. Hence, only a small part of the differences is due to variations in the rate at which pollution is emitted. On an average over a long time, however, rainfall, wind and other meteorological variables are approximately the same, so that changes in the emission of atmospheric pollution can be detected. Experience has shown that reliable conclusions can be drawn from the data gathered at the same test-site over periods of five years, and for this reason it is the practice of the Fuel Research Station to issue periodically reports in which comparison is made of these five-yearly averages. In this way changes in the amount of atmospheric contamination can be determined and their significance can be statistically assessed. Trends in pollution are thus ascertained.

The next table shows the annual rate of deposition of the various pollutants in the neighbourhood of the City Hall, together with the monthly averages for the summer months (April–September), for the winter months (January–March, and October–December) and for the whole year. For comparison, the annual rate of deposition of the various constituents for 1955 is also shown.

CITY HALL SITE
Deposited Matter, tons per square mile

Constituent of Deposit	Monthly Rate of Deposition 1956			Total deposit 1956	Total deposit 1955
	For whole year	For summer months	For winter months		
Total Undissolved Matter	8.04	6.93	9.15	96.48	93.03
Tar	0.23	0.19	0.27	2.74	3.26
Other combustible matter	2.65	2.40	2.89	31.79	30.22
Ash	5.16	4.34	5.99	61.95	59.55
Total Dissolved Matter	6.10	5.33	6.88	73.24	70.68
Calcium, Ca++	0.78	0.70	0.86	9.39	7.67
Chlorides, Cl'	0.96	0.64	1.27	11.50	9.31
Sulphates, SO ₄ "	1.92	1.72	2.12	23.06	20.50
Total Solid Matter Deposited	14.14	12.26	16.03	169.72	163.71
Rainfall, in inches	2.98	3.52	2.39	35.83	32.7
pH value of filtrate from gauge :—					
Maximum	6.9	6.9	6.5	6.9	6.3
Minimum	5.7	5.8	5.7	5.7	4.5
Average	6.1	6.3	6.0	6.1	5.6

It will be seen that the total solid matter deposited during the year was 169.7 tons per square mile, the monthly average being 14.1 tons per square mile. In 1955 the rate of deposition of total solid matter was 163.7 tons per square mile per year. These differences are not significant and further examination of the results in the above table shows that the amounts of the individual constituents of the deposits for these two years were very similar. Pollution was greater in the winter months than in the summer months.

It is of interest to compare these figures with high, average and low values obtained at sites maintained by Co-operating Bodies during the year ended 31st March, 1955, and recorded in the Report of the Director of Fuel Research on the Investigation of Atmospheric Pollution for that year.

	High	Average	Low	Cardiff, 1956
Total solid matter deposited in tons per sq. mile per year ..	1,172	226	70	170

The "high" values are arithmetic means for the six sites at which the six greatest deposits for the whole year were observed, the "average" values refer to all the sites (some 700) at which deposit gauges were in operation, and the "low" values are the arithmetic means for the six sites at which the six lowest deposits for the whole year were observed. The pollution of the atmosphere in the neighbourhood of the City Hall is well below the average of all the sites, but as Dr. W. Powell Phillips, Medical Officer of Health for Cardiff, said in his preface to the Annual Report for 1955, it is "of extreme importance to maintain Cardiff's relatively good position in relation to atmospheric pollution." The Cardiff City Council has authorised the provision of additional apparatus so that measurements can be made in other areas of the City.

Sulphur Pollution during 1956.—The results of the measurements of the sulphur gases in the atmosphere by the lead peroxide method are given in the table on page 92. They are further considered in the table below where comparison is also made with previous years, the figures for the five-yearly periods being taken from the Twenty-seventh Report on the Investigation of Atmospheric Pollution published by the D.S.I.R. during 1955.

Sulphur Pollution—City Hall, Cardiff, site

Period	Sulphur dioxide, rate of absorption expressed as milligrams SO ₂ per 100 square centimetres lead peroxide per day		
	Summer	Winter	Whole Year
1939-44	0.64	1.28	0.96
1944-49	0.61	1.29	0.95
1949-54	0.57	1.24	0.91
1955	0.61	1.21	0.91
1956	0.56	1.24	0.90

Here again it will be seen that there was no significant alteration in sulphur pollution at this site during 1956, though the results indicate that there was rather slightly less pollution by sulphur gases during the summer and slightly more in the winter.

It should be noted that a clean rural atmosphere will give an average active sulphur pollution figure of approximately 0.25 mgm. SO₂ per 100 sq. cms. per day, while heavily polluted industrial areas give an average figure of 5 or more mgm. SO₂ per 100 sq. cms. per day.

The Extent and Effects of Air Pollution.—The smoke from domestic appliances is estimated at about 1,000,000 tons per annum or about one-half of the total smoke emitted, although the coal consumption for domestic purposes is only about one-sixth of the total coal. Sulphur dioxide emitted into the atmosphere from burning fuels is estimated at 5,500,000 tons per annum, of which about 5,000,000 tons is from coal and 500,000 tons from oil. The grit and dust emitted from the burning of coal amounts to about 1,000,000 tons per annum mainly from industrial undertakings. The increased use of small sized high ash coal has accentuated the problem.

The effects of this pollution can be observed in the blackening of buildings and their deterioration, the corrosion of metalwork, the rotting of leather and fabrics, and the detrimental effects on agriculture. The effects on health are most noticeable in periods of polluted fog, as instanced by the 4,000 additional deaths in London during the "smog" period of December, 1952.

The cost of air pollution in Great Britain has been estimated at £250,000,000 per annum, equivalent to £10 per head of population in the black areas and £5 per head over the whole population. This excludes the loss of £25—50,000,000 from the imperfect combustion of coal.

The Clean Air Act, 1956.—In July, 1953, a Committee was appointed under the Chairmanship of Sir Hugh Beaver with the following terms of reference :—

"To examine the nature, causes and effects of air pollution and the efficacy of present preventive measures; to consider what further preventive measures are practicable; and to make recommendations."

The Committee issued an Interim Report in November, 1953, and a Final Report in 1954, and its recommendations have been incorporated in the Clean Air Act of 1956. This Act deals with pollution caused by smoke including soot, ash and grit. "Dark smoke" is defined, and subject to certain defences and temporary exemptions, its emission from industrial chimneys and domestic premises is prohibited. Emission itself becomes an offence—the question of nuisance being caused and having to be proved does not now arise. Grit and dust emission must be minimised by practicable means, and all new furnaces burning pulverised fuel must install approved dust-arresting plant. Power is also granted to any Local Authority to make an order (subject to Ministerial confirmation) declaring part or the whole of its district a "smoke control area." Subject to specified exceptions and limitations, the emission of chimney smoke in such an area, on any day, is an offence. It is a defence if the emission was caused only by the burning of an authorised fuel.

Considerable variations in the terms and conditions of the order are possible. The provisions may be different for different parts of the area, and the order may be limited to specified classes of buildings, or may exempt specified buildings or classes of buildings. Specified fireplaces and classes of fireplaces may also be exempted. A smoke control area may therefore be a smokeless zone in the original sense of that term, or may be an area in which defined emissions of smoke are permitted.

For chemical and allied processes there exists the Alkali, etc., Works Regulation Act. This Act contains provisions for its extension by means of Statutory Orders as new processes develop. Works covered by the Act are registered, subjected to regular inspections, and the processes are required to be equipped with the best practicable means to reduce the discharge of noxious and offensive gases to the minimum. The Act is administered by the Alkali Inspectorate. The Clean Air Act now provides that the Alkali Act shall have effect in relation to smoke, grit and dust from scheduled processes as it has in relation to noxious or offensive gases, and that references in the Alkali Act to such gases shall be construed as including smoke.

The Clean Air Act also provides for the appointment of a Clean Air Council for England and Wales, of which the Minister of Housing and Local Government shall be the Chairman, and of a similar Council for Scotland of which the Secretary of State for Scotland shall be the Chairman. Both Councils are defined as consultative councils and their purposes are laid down as :—

- (a) Keeping under review the progress made (whether under this Act or otherwise) in abating the pollution of the air in England and Wales, and in Scotland; and
- (b) obtaining the advice of persons having special knowledge, experience or responsibility in regard to prevention of pollution of the air.

Certain provisions of the Act, including the provision to create "smoke control Areas" came into operation on the 31st December, 1956, the remaining provisions which deal with the prohibition of dark smoke, and the reduction of grit and dust from industry, will be brought into operation at a later date.

The passing of the Clean Air Act will mean a vigorous drive against atmospheric pollution in the next few years, particularly by the reduction of smoke and grit. Local Authorities, the Department of Scientific and Industrial Research, and Industry are all concentrating on pollution problems. During the last year or two many professional bodies have held meetings to discuss pollution in relation to their own industry or organisation. The desire for clean air has never been so widespread, but as the Beaver Committee said, "without systematic records in a number of areas over several years it is impossible to gauge the magnitude of the problems to be solved, or to measure the effects of changing conditions or ameliorative action."

MISCELLANEOUS SAMPLES

Sterilised Milk.—The Milk (Special Designation) (Pasteurised and Sterilised Milk) Regulations, 1949, require sterilised milk to be filtered or clarified, homogenised and heated in bottles to a temperature not below 212°F. for such a period as to ensure that it will satisfy a prescribed test designated the Turbidity Test. This test is based upon the fact that heating to not less than 212°F. for a period sufficient for effective sterilisation will also completely denature all the soluble protein of the milk. Samples that show the presence of soluble protein under the conditions of the test are insufficiently heated or contain raw milk.

During the year, 74 samples of sterilised milk were submitted under these Regulations and all of them satisfied the turbidity test.

Imported Foods.—Twenty-two samples were examined for the Cardiff Port Health Authority. They comprised the following articles:—

Apples	..	..	2	Orange Slices, Canned	..	3
Butter	..	..	2	Oranges	..	3
Cheese	..	..	1	Pears	..	1
Cherries, Canned	..	..	1	Pilchards, Canned	..	1
Grapes	..	..	2	Tomato Juice, Canned	..	1
Lunch Tongue, Canned	..	..	1	Tomato Paste, Canned	..	3
Onions	..	..	1			

With the exception of the onions, these samples were satisfactory. There was no excessive metallic contamination in the canned foods, the apples, pears and grapes were substantially free from arsenical spray residues, and the oranges were free from thiourea. The cheese was made from full-cream milk and contained 35.4 per cent of milk-fat, while the samples of butter were genuine and the water content of each was 14.8 per cent, the maximum amount permitted being 16.0 per cent.

The outer layers of the onions that were submitted were dark brown in patches and some spots were almost black. It was suggested that they might have been contaminated with oil but there was no evidence of this and it seemed likely that the deterioration that had occurred was natural.

Fertilisers and Feeding Stuffs.—Thirteen samples of fertilisers and ten of feeding stuffs were submitted under the provisions of the Fertilisers and Feeding Stuffs Act, 1926. This Act requires Statutory Statements of composition to be given with fertilisers and feeding stuffs, and Regulations under the Act prescribe limits of variation between these statements and the actual composition of the article. On the 1st January, 1956, new Regulations came into operation. They are more flexible and realistic than those they replace, e.g., for most feeding stuffs they provide tolerances for oil and fibre declarations and the value of hydrated lime is now based upon its neutralising value instead of on its calcium hydroxide content. The procedures laid down for sampling have been amended and the methods of analysis have also been revised.

All the samples agreed, within the limits of variation permitted by the Regulations, with the particulars given in the statutory statements supplied.

Public Health Department.—In addition to the 36 extensive analyses in connection with atmospheric pollution, 214 samples comprising the following articles were examined for the Public Health Department :—

Swimming bath waters ..	162	Pickling brine	2
Other water samples ..	10	Dust and Grit	5
Human milk	26	Rat bait	3
Foods	5	Liquid	1

The examination of samples from the swimming baths in the City provides information for the maintenance of safe and attractive water in the baths, with freedom from deleterious effects upon the eyes and skin of the bathers.

The other water samples examined for this Department were from wells, streams and the basements of premises (to ascertain the source of flooding).

Of the 26 samples submitted as human milk by the Human Milk Bureau at St. David's Hospital (by arrangement with the Public Health Department), three contained added water in amounts ranging from 80–95 per cent ! These three samples were taken from milk supplied by one mother.

The samples of grit and dust were submitted in connection with complaints of a grit nuisance in certain districts. The nature of these samples was ascertained.

In addition to the analytical work carried out for the Public Health Department, a thick syrup poison bait containing thallium sulphate was made up periodically for the destruction of household ants, and 112 dozen cardboard boxes were waxed and filled with the bait for issue to the public by the Chief Public Health Inspector. Experience with this bait over a number of years has shown that it is most successful, and many long-established colonies have been completely wiped out.

Solutions have also been prepared regularly for the use of the Superintendent of Baths (Mr. Barnfield) in the control of the break-point chlorination process, at the Guildford Crescent Baths.

City Surveyor's Department.—Eleven of the samples from the City Surveyor's Department, consisting of river water (3), ground water from trial bore-holes (5) and soil (3), were taken in connection with various building projects, including the Wales Empire Swimming Pool and the Technical College extensions, in order to ascertain whether the sub-soil water was likely to have any deleterious action on concrete.

The other sample was water taken from a hole in the ground below the Law Courts in order to determine its origin.

The Laboratory has also been consulted by the City Surveyor's Main Drainage Section with regard to the treatment of an effluent from a new steel hardening plant and also in connection with the disposal of a trade effluent from a new warehouse on the Colchester Avenue estate.

Waterworks Department.—One hundred and nineteen samples of water and six of other articles were examined for the Waterworks Department.

The waters included samples taken in connection with the Llandegfedd reservoir scheme, at the Cantref and Llwyn-on Filter Plants, in connection with the detection of leakage from water mains, and the investigation of complaints. The other articles were in connection with the corrosion of metal objects and other alleged defects in the water supply.

Other Samples.—The following are particulars of 30 samples from other sources that were examined during the year :—Foods (18), Water (8), Distilled Witch Hazel Lotion (3), and a Spirituous Liquid.

XI—METEOROLOGICAL OBSERVATIONS

1956

The geographical position of the Meteorological Station, which is situated at Penylan, Cardiff, is Latitude $51^{\circ} 30' N.$, Longitude $3^{\circ} 10' W.$, and the height of the Station above mean sea level is 203 feet. Observations were made daily at 9.0 a.m. Summaries of the observations made during 1956 are given in the following tables :—

BAROMETRIC PRESSURE AND RELATIVE HUMIDITY

Month	Attached Ther- mometer (Mean)	Mean Barometric Pressure		Hygrometer		
		Uncorrected	Reduced to Mean Sea Level and Temp. $32^{\circ} F.$	Dry Bulb (Mean)	Wet Bulb (Mean)	Mean Relative Humidity
	$^{\circ}F.$	Inches	Inches	$^{\circ}F.$	$^{\circ}F.$	%
January ..	41	29.653	29.867	39.1	38.0	90
February ..	33	30.031	30.274	31.7	30.9	91
March ..	43	29.745	29.952	42.1	39.8	80
April ..	47	29.797	29.992	46.8	43.3	73
May ..	53	29.993	30.168	55.2	50.6	71
June ..	57	29.907	30.069	58.7	53.5	69
July ..	60	29.549	29.698	61.1	57.1	77
August ..	58	29.664	29.822	58.3	54.7	78
September ..	58	29.782	29.940	58.0	55.8	86
October ..	51	29.982	30.166	49.2	47.8	90
November ..	46	29.958	30.158	43.5	41.9	87
December ..	44	29.799	30.004	42.7	42.1	86
	49	29.821	30.009	48.96	46.3	81

TEMPERATURE

Month	Absolute Maximum	Absolute Minimum	Mean of Maximum	Mean of Minimum	Mean Temperature	Difference from Average (67 years)
	$^{\circ}F.$	$^{\circ}F.$	$^{\circ}F.$	$^{\circ}F.$	$^{\circ}F.$	$^{\circ}F.$
January ..	52	26	45.3	35.0	40.1	+0.2
February ..	50	16	38.0	27.3	32.6	-7.7
March ..	60	27	50.6	36.8	43.7	+0.7
April ..	65	33	54.7	38.7	46.7	-0.3
May ..	71	36	62.0	46.2	54.1	+1.3
June ..	76	41	64.9	50.7	57.8	—
July ..	80	44	67.3	54.2	60.7	-0.1
August ..	71	46	64.5	51.3	57.9	-2.8
September ..	74	44	63.4	53.2	58.3	+1.5
October ..	64	36	56.4	44.6	50.5	-0.2
November ..	55	28	48.7	39.8	44.2	-0.6
December ..	55	25	47.3	39.0	43.1	+1.8
	64	34	55.2	43.1	49.1	-6.2

UNDERGROUND TEMPERATURE AND SUNSHINE

Month	Underground Temperature (Mean)		Bright Sunshine	
	1 ft.	4 ft.	Total Duration	Difference from Average (48 years)
	°F.	°F.	Hours	Hours
January ..	41.1	45.5	62.9	+ 10.5
February ..	37.2	39.1	101.8	+ 27.0
March ..	42.1	42.5	152.5	+ 31.7
April ..	47.8	46.7	190.3	+ 21.6
May ..	55.1	51.1	241.4	+ 38.8
June ..	59.8	55.4	196.9	—17.5
July ..	63.2	58.7	157.3	—42.0
August ..	61.6	59.3	194.4	+ 8.6
September ..	59.1	58.8	71.0	—74.3
October ..	53.3	56.0	117.0	+ 12.2
November ..	46.6	51.5	49.9	—14.4
December ..	44.9	48.6	22.0	—26.4
	51.0	51.1	1,557.4*	—24.2

* = 34.8% of possible duration and a daily average of 4.25 hours

RAINFALL

Month	Total	Difference from Average (67 years)	Greatest Fall in 24 hours*		Number of Rain-days (0.01 inch or more)
			Amount	Day	
	Inches	Inches	Inches		
January ..	5.02	+ 0.97	0.92	22nd	18
February ..	0.34	—2.56	0.10	16th	9
March ..	1.37	—1.47	0.35	2nd	10
April ..	1.85	—0.82	0.71	24th	11
May ..	1.07	—1.68	0.37	9th	10
June ..	2.23	—0.34	0.78	3rd	14
July ..	2.82	—0.23	0.43	18th	16
August ..	5.49	+ 1.45	1.52	25th	18
September ..	5.18	+ 1.84	1.53	27th	13
October ..	2.72	—1.91	0.92	8th	17
November ..	1.45	—2.70	0.39	8th	12
December ..	5.15	+ 0.73	0.40	15th	23
	34.69	—6.72	1.53 in. on 27th Sept.		171

*24 hours ended 9.0 a.m. (G.M.T.) next day

XII—MISCELLANY

Disinfection.—Disinfection was carried out at 147 houses during the year, and 837 articles of bedding, clothing, etc., were removed to and disinfected at the Disinfecting Station; 351 infected articles were destroyed by arrangement with or at the request of owners.

Cleansing Station.—The total number of baths for scabies, pediculosis, etc., undertaken at the Cleansing Station was 27.

Public Mortuary.—Fifty-seven bodies (43 males, 14 females) were taken to the Public Mortuary. Thirty-three bodies were removed from the mortuary to the Cardiff Royal Infirmary where post-mortem examinations were performed.

National Assistance Acts, 1948 and 1951.—No new cases were dealt with during the year.

PORT HEALTH SERVICE

REPORT FOR 1956 OF Mr. T. G. NEWBY, Chief Port Health Inspector

The Cardiff Port Health Authority was constituted by Provisional Order in 1882, becoming permanently constituted with extended limits of jurisdiction in 1894. The limits of the Port Health District extend from Sully Island to the Rhymney River, the Authority having jurisdiction over all waters, docks, harbours and vessels within the said limits.

The Port Health Authority is invested with all the functions, rights and liabilities of an Urban Sanitary Authority under certain sections of the Public Health Acts, so far as they are applicable to waters, vessels, persons, goods or things on, or landed from, any vessel within the said jurisdiction.

In accordance with the instructions of the Ministry of Health, Sections I, V, VI, VIII, XIV, XV and XVI of the report are not repeated in full—only changes which have taken place in these Sections are recorded.

SECTION I—STAFF**TABLE A**

Changes in Inspectorial Staff which have taken place during the year 1956 :—

F. S. Barnard, Chief Port Health Inspector,
retired 30th June, 1956.

T. G. Newby, Appointed Chief Port Health Inspector,
1st July, 1956.

W. J. Davies, Appointed Senior Assistant Port Health Inspector,
1st July, 1956.

SECTION II**AMOUNT OF SHIPPING ENTERING THE DISTRICT
DURING THE YEAR**

The number and tonnage of vessels entering the port (which includes Penarth) inspected by officers of the Port Health Authority during 1956 are set out below :—

TABLE B

Ships from	Number	Tonnage	Number Inspected by the		Number of Ships reported as having, or having had during the voyage, infectious disease on board
			Medical Officer of Health	Port Health Inspector	
Foreign Ports ..	798	1,241,951	58	609	2
Coastwise ..	1,915	830,881	3	702	2
TOTAL ..	2,713	2,072,832	61	1,311	4

The following table shows the number of vessels entering the port which were dealt with by the department each month during 1956 :—

Month			From Foreign Ports	Coastwise	Total
January ..	..		84	181	265
February ..	..		63	145	208
March ..	..		66	140	206
April ..	..		74	169	243
May ..	..		54	175	229
June ..	..		59	159	218
July ..	..		80	146	226
August ..	..		58	143	201
September ..	..		69	170	239
October ..	..		67	157	224
November ..	..		64	178	242
December ..	..		60	152	212
TOTAL ..	..		798	1,915	2,713

The nationalities of the several types of vessels entering the port which were dealt with by the department during 1956 are shown in the following table :—

Nationality	Steam	Motor	Sailing	Total
Argentine ..	1	2	—	3
Belgian ..	1	4	—	5
British ..	1,056	678	96	1,830
Costa Rican ..	19	—	—	19
Danish ..	23	9	—	32
Dutch ..	3	423	—	426
Egyptian ..	—	2	—	2
Finnish ..	11	1	—	12
French ..	38	16	—	54
German ..	12	52	—	64
Greek ..	6	—	—	6
Indian ..	3	2	—	5
Irish ..	1	28	—	29
Italian ..	4	1	—	5
Liberian ..	15	1	—	16
Norwegian ..	19	30	—	49
Panamanian ..	12	6	—	18
Polish ..	2	—	—	2
Portuguese ..	—	1	—	1
Russian ..	1	—	—	1
Spanish ..	23	5	—	28
Swedish ..	63	37	—	100
Swiss ..	1	3	—	4
Syrian ..	1	—	—	1
Turkish ..	1	—	—	1
TOTAL ..	1,316	1,301	96	2,713

SECTION III

CHARACTER OF SHIPPING AND TRADE DURING THE YEAR

TABLE C

Passenger Traffic	{	Number of passengers INWARDS ..	226
		Number of passengers OUTWARDS ..	168
Cargo Traffic	{	Principal IMPORTS—Iron ore, timber, pitwood, grain, fruit and provisions.	
		Principal EXPORTS—Coal, patent fuel, heavy iron and steel goods, and general merchandise.	

Principal Countries from which ships arrive—Brazil, Canada, Finland, France, Holland, India, Italy, Norway, North and West Africa, Portugal, Spain, Sweden and the United States of America.

SECTION IV

INLAND BARGE TRAFFIC

Numbers and Tonnage using the District and places served by the Traffic
NONE

SECTION V

WATER SUPPLY

NO CHANGE

Reports and tests for contamination.—During the year 21 samples of drinking water from ships were submitted to the Public Health Laboratory for bacteriological examination, the results being as follows :—

Satisfactory	..	16
Contaminated	..	5
		—
TOTAL	..	21
		—

Notices were served on the masters of the vessels having contaminated water on board, and in each instance the tanks were emptied, cleansed and refilled at this port.

SECTION VI

PUBLIC HEALTH (SHIPS) REGULATIONS, 1952-1954

NO CHANGE

Cleansing and Disinfestation.—During the year eighteen vessels were found to be infested with cockroaches and notices were served upon the masters requiring them to take all necessary steps to eradicate the insects. Twelve seamen discovered to be suffering from scabies were treated at the Seamen's Baths belonging to the Cardiff Corporation.

SECTION VII

SMALLPOX

Name of Isolation Hospital to which Smallpox cases are sent from the district.

From Cardiff City Isolation Hospital to Penrhys Isolation Hospital, Pentre, Rhondda.

Arrangements for transport of such cases to that hospital by ambulance, giving the name of the Authority responsible for the ambulance and the vaccinal state of the ambulance crews.

Arrangements are made at the City Isolation Hospital, the Cardiff City Council being responsible for the ambulance service.

Ambulance crews are vaccinated.

Names of Smallpox consultants available.

G. Emrys Harries, M.B., B.S., D.P.H.,
Medical Superintendent,
Cardiff City Isolation Hospital.

G. F. J. Thomas, M.R.C.S., L.R.C.P., D.P.H.,
Senior Hospital Medical Officer,
St. David's Hospital, Cardiff.

Facilities for laboratory diagnosis of smallpox.

Facilities are provided by the Public Health Laboratory Service, Institute of Pathology, Cardiff Royal Infirmary.

SECTION VIII

VENEREAL DISEASE

NO CHANGE

The number of cases of venereal disease dealt with at the special treatment centre for seamen during the year were as follows :—

Persons attending at the Centre for the First Time					Total Attendances
Year	Syphilis	Gonorrhoea	Non-Venereal and Other Conditions	Total	
1956	62	176	182	420	2,241

Nine cases of venereal disease came to the knowledge of officers of the Authority during the year and were recommended for treatment at the centre.

SECTION IX

CASES OF NOTIFIABLE AND OTHER INFECTIOUS DISEASES ON SHIPS

During the year three cases of infectious disease were landed from vessels and one case of infectious disease was reported to have occurred on a vessel during the voyage, as shown in the following table :—

TABLE D

Category	Disease	Number of cases during the year		Number of Ships concerned
		Passengers	Crew	
Cases landed from ships from foreign ports	Meningitis ..	—	1	1
Cases which have occurred on ships from foreign ports but have been disposed of before arrival	Influenzal Pneumonia	—	1	1
Cases landed from other ships ..	Influenza ..	—	2	2

SECTION X

OBSERVATIONS ON THE OCCURRENCE OF MALARIA IN SHIPS

No cases of malaria were discovered on vessels entering the port during the year, which would confirm that anti-malarial measures are being well applied.

It would appear also, that the possibility of infection on the West African Seaboard has been considerably reduced, as may now be seen by the great reduction in reported cases.

SECTION XI

MEASURES TAKEN AGAINST SHIPS INFECTED WITH OR SUSPECTED OF PLAGUE

During the year no ships arrived with a case, or suspected case, of plague on board. Vessels arriving from plague-infected or suspected areas are visited on arrival, or as soon afterwards as possible, by the Port Medical Officer and Port Health Inspector on rota

duty. All vessels arriving from these areas are thoroughly searched for rat evidence by the Authority's rodent operative, trapping is carried out and any rats caught or found dead are submitted to the Public Health Laboratory for bacteriological examination.

MEASURES OF RAT DESTRUCTION ON VESSELS FROM PLAGUE "INFECTED" OR "SUSPECTED" AREAS

Total number of such vessels arriving	Number of such vessels fumigated by HCN	Number of rats killed	Number of such vessels on which trapping, poisoning, etc. were employed	Number of rats killed	Number of such vessels on which measures of rat destruction were not carried out
59	—	—	40	5	19

SECTION XII

MEASURES AGAINST RODENTS IN SHIPS FROM FOREIGN PORTS

Procedure for inspection of ships for rats.

Certificates of deratting or deratting exemption are checked for validity and enquiries made to members of crews as to whether rats have been seen or are known to be on board. Trapping is carried out on vessels where rat indications are found and, as a precautionary measure, instructions are given to place rat guards on mooring ropes. Masters of vessels producing invalid certificates, and on which vessels the rat population cannot be classed as negative, are instructed to have the vessels fumigated.

Arrangements for the bacteriological or pathological examination of rodents, with special reference to rodent plague, including the number of rodents sent for examination during the year.

A proportion of all rats trapped or found after fumigation is submitted to the Public Health Laboratory for examination for the detection of plague. The number of rats destroyed by fumigation was 35, of which 3 were submitted for examination for the detection of plague. The number of rats caught by traps was 7, one of which was examined for plague. The result of the examination in each instance proved to be negative.

Arrangements in the district for deratting ships, the methods used, and, if done by a commercial contractor, the name of the contractor.

Arrangements for the deratting of ships by hydrogen cyanide have been carried out in strict accordance with the Hydrogen Cyanide (Fumigation of Ships) Regulations, 1951, which became operative on the 1st February, 1952. During the year, 2 vessels were fumigated by hydrogen cyanide and one vessel was deratted by sodium fluoroacetate for the issue of deratting certificates. Whenever deratting of a vessel is arranged, the department is notified in advance by the contractor, and an officer of the Port Health Authority attends during the operation. Deratting is carried out by private contractors, the undermentioned operate in the district:—

The Associated Fumigators Limited, London
The Fumigation Services Ltd., Barking, Essex
Scientex Limited, Cardiff
Messrs. David Thomas and Son Ltd., Cardiff
The Western Sealing and Painting Co., Cardiff.

Progress in the rat-proofing of ships

The application and incorporation of rat-proofing principles now observed in modern ship construction is having the desired effect of reducing rodent infestation to a minimum, and it is evident that, in providing these preventive measures, much thought has been given to this question by owners and ship builders.

TABLE E
RODENTS DESTROYED DURING THE YEAR IN SHIPS FROM
FOREIGN PORTS

Category	Number
Black rats	42
Brown rats	—
Species not known	—
Sent for examination	4
Infected with plague	—

TABLE F
DERATTING CERTIFICATES AND DERATTING EXEMPTION CERTIFICATES
ISSUED DURING THE YEAR FOR SHIPS FROM FOREIGN PORTS

Number of Deratting Certificates issued					Number of Deratting Exemption Certificates issued 6	Total Certificates issued 7
HCN 1	After fumigation with Other fumigant (state method) 2	After trapping 3	After poisoning 4	Total 5		
2	—	—	*1	3	120	123

*Deratted by Sodium Fluoroacetate (' 1080 ')

The fees received by the Port Health Authority in respect of these certificates amounted to £381 19s. 0d.

The following table shows the numbers of deratting and deratting exemption certificates issued in each of the past ten years :—

Year	Deratting Certificates		Deratting Exemption Certificates		Total
	Number	Percentage	Number	Percentage	
1947	27	21	101	79	128
1948	38	20	150	80	188
1949	35	22	121	78	156
1950	20	15	113	85	133
1951	15	11	123	89	138
1952	12	8	138	92	150
1953	3	3	116	97	119
1954	7	6	119	94	126
1955	5	4	119	96	124
1956	3	2	120	98	123

The number of vessels deratted, the total number of dead rats found after deratting, and the average number of dead rats found per vessel during each of the years 1947–1956 are set out below :—

Year	Number of Vessels Deratted	Total Number of rats found dead after Deratting	Average Number of dead rats found per Vessel
1947	27	345	12.78
1948	38	339	8.92
1949	35	261	7.46
1950	20	75	3.75
1951	15	174	11.60
1952	12	63	5.25
1953	3	7	2.33
1954	7	50	7.14
1955	5	46	9.20
1956	3	35	11.67

SECTION XIII

INSPECTION OF SHIPS FOR NUISANCES

TABLE G

INSPECTIONS AND NOTICES

Category of nuisance and number of Inspections	Notices served		Result of serving Notices
	Statutory Notices	Other Notices	
Defects of Original Construction	—	1	Ships on which defects were remedied 1
Structural Defects through Wear and Tear	—	83	Ships on which defects were remedied 82
Dirt, Vermin and other Conditions prejudicial to health	—	43	Ships on which nuisances were remedied 42
TOTAL	—	127	125

The number of re-visits made to vessels in connection with health survey and the remedy of sanitary defects and nuisances totalled 3,435.

Defects and nuisances dealt with during 1956 were as follows :—

Insufficient heating	..	..	..	..	1
Defective ventilators	..	..	..	..	17
„ skylights	..	..	..	..	2
„ steam heaters, stoves, stove-pipes, etc.	..	..	..	..	57
„ sanitary conveniences, flushes, etc.	..	..	..	..	59
„ side ports, deck-prisms, etc.	..	..	..	..	78
„ bulkheads	..	..	..	..	5
„ floors	..	..	..	..	20
„ doors	..	..	..	..	23
„ bunks and bedsteads	..	..	..	..	19
„ food-lockers and refrigerators	..	..	..	..	9
„ baths, wash-hand basins and waste pipes	..	..	..	..	117
„ drain pipe	..	..	..	..	1
„ scuppers	..	..	..	..	44
Leaking decks	..	..	..	..	7
Verminous crew quarters	..	..	..	..	36
Dirty crew quarters	..	..	..	..	22
„ messrooms	..	..	..	..	16
„ provision storerooms and pantries	..	..	..	..	7
„ galley	..	..	..	..	1
„ sanitary conveniences	..	..	..	..	11
„ bathrooms and wash-houses	..	..	..	..	5
„ fresh-water tanks	..	..	..	..	22
Miscellaneous	..	..	..	..	12
TOTAL	..	..	..	..	591

Smoke Nuisances.—During the year vessels lying in the docks were kept under observation and where it was found necessary the responsible persons in charge of fires on board were warned to take proper steps to avoid creating a nuisance by the emission of black smoke.

SECTION XIV

PUBLIC HEALTH (SHELL-FISH) REGULATIONS, 1934 AND 1948

NO CHANGE

SECTION XV

MEDICAL INSPECTION OF ALIENS

(Applicable only to Ports approved for the landing of Aliens)

Changes in list of Inspectorial Staff engaged on this work.

T. G. Newby, Chief Port Health Inspector

W. J. Davies, Senior Assistant Port Health Inspector

F. S. Barnard, Chief Port Health Inspector (retired).

Accommodation for medical inspection and examination.

NO CHANGE

Organisation of work.

NO CHANGE

Nature and amount of aliens traffic.

Passenger traffic at the port is relatively small and casual. Thirty-six ships arrived during the year with 81 alien passengers on board and thirteen of these were subjected to detailed medical examination.

SECTION XVI

MISCELLANEOUS

NO CHANGE

The Dangerous Drugs Regulations, 1953, No. 499, Section 13 (2) (a).—No certificates were issued authorising the masters of foreign ships to purchase dangerous drugs.

Certificates of Health.—During the year no certificates in respect of the health of the port were issued to Shipping Companies.

THE PREVENTION OF DAMAGE BY PESTS (APPLICATION TO SHIPPING) ORDER, 1951

The Prevention of Damage by Pests (Application to Shipping) Order, 1951, made under Section 23 of the Prevention of Damage by Pests Act, 1949, applying the provisions of the Act, with appropriate modifications to shipping, has been strictly enforced.

Under the provisions of the above Order, periodical inspection of coastal vessels, etc., is carried out by officers of the department, and 28 Rodent Control Certificates were issued to masters of vessels during the year.

Diseases of Animals Acts, etc.—Eighty-three dogs and 134 cats were brought to the port on vessels. All the vessels were visited regularly during their stay in port to ensure that the requirements were observed.

FOOD INSPECTION

The principal food imports during the year were from Australia and New Zealand and consisted of beef, mutton, pork, lamb, offal, butter, cheese and fresh and dried fruits. From Canada and the United States of America, wheat, flour, cereals, canned meats and fruit were imported, and from European countries, fresh fruits and canned vegetables. In addition to these direct imports, large quantities of foodstuffs, transhipped at other ports in the British Isles arrived by coastwise traffic.

Examination of imported food is carried out by the food inspectors in the dockside warehouses and occasionally on board ship. If the food examined is found to be in good condition, the whole consignment is released for distribution, but if found to be diseased or unsound, the whole consignment is detained until a complete examination is carried out. Diseased and unsound articles of food are disposed of under the supervision of the food inspectors. When necessary, samples of foodstuffs are submitted for examination.

Examination of imported meat is carried out in the transit sheds on the dock sides and in the local cold stores. The glandular examination of mutton and lamb carcasses weighing over 42 lb. was continued but very few cases of caseous lymphadenitis were found.

Imported Foodstuffs.—The quantities of various kinds of foodstuffs imported during the year are shown in the following table:—

<i>Description</i>	<i>Quantity</i>	<i>Description</i>	<i>Quantity</i>
Bacon (Bales)	15,942	Garlic (Boxes)	67
Bananas (Stems)	85,000	Gelatine Powder (Bags)	1,200
Barley (Tons)	4,665	Glucose (Bags)	50
Biscuits (Boxes)	35	Hams (Boxes)	461
Blanmange Powder (Bags)	300	Jam, Canned (Boxes)	5
Butter (Barrels)	55	Lard (Boxes)	56,399
Butter (Boxes)	421,481	Macaroni (Boxes)	5,365
Cauliflower, Pickled (Barrels)	142	Maize (Tons)	2,600
Caraway Seed (Bags)	3	Margarine (Boxes)	28,800
Cheese (Boxes)	17,314	Meat, Canned (Boxes)	77,374
Cheese (Crates)	55,681	Milk, Canned (Boxes)	595
Cheese (Tubs)	18	Mushrooms, Pickled (Box)	1
Cheese (Singles)	50	Mussels, Pickled (Boxes)	20
Cheesespread, Canned (Boxes)	25	Pork, Pickled (Barrels)	100
Cocktail Cracklings, Canned (Boxes)	10	Powdered Starch (Bags)	560
Cocoa Butter (Bags)	50	Provisions (Boxes)	11
Cocoa Powder (Bags)	2,055	Potatoes (Bags)	433,089
Coconuts (Bags)	475	Rice (Bags)	4,261
Confectionery (Boxes)	870	Rind, Pickled (Barrels)	39
Cornflower (Bags)	3,600	Salami (Boxes)	149
Cornstarch (Bags)	980	Sauerkraut, Canned (Boxes)	135
Crab, Canned (Boxes)	15	Shrimps, Canned (Boxes)	145
Farinoca (Bags)	225	Tapioca (Bags)	50
Fish, Canned (Boxes)	4,162	Tomato Concentrates (Boxes)	340
Fish, Fresh (Tons)	562	Tomato Juice, Canned (Boxes)	360
Fish Preserves, Canned (Boxes)	20	Tomato Paste, Canned (Boxes)	2,103
Flour (Bags)	33,696	Tomato Puree, Canned (Boxes)	2,897
Flour (Tons)	400	Tomato Sauce (Boxes)	100
Fondant (Boxes)	1,840	Vegetables, Canned (Boxes)	106,736
Fruit, Canned (Boxes)	38,820	Vegetables, Dried (Bags)	5,539
Fruit, Dried (Boxes)	3,700	Vegetables, Fresh (Bags)	31,469
Fruit, Fresh (Boxes)	264,988	Vegetables, Fresh (Boxes)	26,993
Fruit, Fresh (Barrels)	23,870	Vegetables, Pickled (Barrels)	255
Fruit Juice, Canned (Boxes)	4	Walnuts (Bags)	6,648
Fruit Pulp, Canned (Boxes)	2,475	Walnuts, Pickled (Barrels)	5
Fruit Pulp (Barrels)	322	Wheat (Tons)	83,036

Oversea Meat.—In addition to the foodstuffs already referred to, nine vessels arrived with the following quantities of oversea meat:—

<i>Description</i>			<i>Quantity</i>	<i>Description</i>			<i>Quantity</i>
Carcases of lamb	..	..	71,038	Boneless meat (Bags)	..	..	1,477
Carcases of mutton	..	..	8,025	Boneless meat (Boxes)	..	..	234
Quarters of beef	..	..	36,417	Veal (Bags)	..	..	1,881
Fores of beef	..	..	264	Glands (Boxes)	..	..	29
Hinds of beef	..	..	703	Sundries (Packages)	..	..	15,099
Beef (Bags)	..	..	1,849	Offal (Packages)	..	..	260
Sides of pork	..	..	2,285	Offal (Bag)	..	..	1

The quantities of various kinds of foodstuffs withheld from human consumption during the year are shown below:—

			Tons	cwts.	lbs.
Arrowroot	..	..	—	—	11
Barley	..	..	17	3	49
Biscuits	..	..	—	—	4½
Cereals	..	..	1	3	84
Cheese	..	..	—	1	72
Coffee	..	..	—	1	96
Dhallex	..	..	—	1	61
Dried Ginger	..	..	—	—	30
Eggs, Frozen	..	..	—	—	55
Fish, Canned	..	..	—	—	0½
Fish, Frozen	..	..	—	2	106
Flour	..	..	4	12	4
Fruit, Canned	..	..	4	7	41
Fruit, Dried	..	..	—	3	106
Fruit, Fresh	..	..	7	2	92
Fruit (Jars)	..	..	9	5	48
Fruit Juice, Canned	..	..	—	—	31
Fruit Pulp, Canned	..	..	—	—	30
Ground Nuts	..	..	—	—	56
Jam, Canned	..	..	—	—	15
Lard	..	..	—	2	7½
Lime Juice (Bottles)	..	..	—	—	82
Margarine	..	..	—	—	44
Marmalade, Canned	..	..	—	—	14
Meat, Canned	..	..	—	9	19½
Meat, Frozen	..	..	—	11	64
Milk, Canned	..	..	—	2	17
Oats, Rolled	..	..	—	2	2
Pollards	..	..	—	1	28
Potatoes	..	..	301	4	103
Rice	..	..	—	11	32
Salt	..	..	—	—	84
Sausage, Canned	..	..	—	—	80½
Semolina	..	..	—	—	20
Spaghetti	..	..	—	—	30
Sugar	..	..	—	2	—
Tomato Paste, Canned	..	..	—	—	10
Tomato Puree, Canned	..	..	—	—	30
Tumeric	..	..	—	—	34
Vegetables, Canned	..	..	6	8	76
Vegetables, Dried	..	..	—	—	63
Vegetables, Fresh	..	..	1	6	32
Vinegar	..	..	—	—	27½
Wheat	..	..	1	13	37
TOTAL	..	..	357	8	25

The Public Health (Imported Food) Regulations, 1937-1948, the Public Health (Preservatives, etc., in Food) Regulations, 1925-1948, and the Food and Drugs Act, 1938 (Section 39).—Twenty-two samples of imported food were submitted to the Public Analyst for analysis. The nature, country of origin, and the number of samples are shown in the following table :—

Description	Country of Origin	Number of Samples
Apples	New Zealand ..	2
Butter	New Zealand ..	2
Cheese	New Zealand ..	1
Cherries, Canned	Italy	1
Grapes	British Columbia ..	1
Grapes	Spain	1
Lunch Tongue, Canned	Holland	1
Onions	Spain	1
Oranges	Palestine	3
Oranges, Canned	Morocco	3
Pears	British Columbia ..	1
Pilchards, Canned	South Africa ..	1
Tomato Juice, Canned	Italy	1
Tomato Paste, Canned	Italy	3

Nineteen of the samples were reported to be genuine or to contain preservatives within the limits prescribed in the Public Health (Preservatives, etc. In Food) Regulations, the three samples of canned oranges taken from a consignment imported from Morocco being reported unsound through metallic contamination, the consignment was subsequently destroyed.

Bacteriological Examinations.—Samples taken from 49 tins of Chinese Frozen Egg and 24 tins of Turkish Frozen Egg were submitted for bacteriological examination, two tins (1 x 11 lb. and 1 x 44 lb.) of Chinese Frozen Egg were found to contain positive salmonella and were subsequently destroyed. One sample of canned Lunch Tongue from Holland submitted for examination proved to be satisfactory.

The Public Health (Imported Milk) Regulations, 1926.—No fresh milk was imported during the year.

CITY OF CARDIFF EDUCATION COMMITTEE

SCHOOL HEALTH SERVICE

1956

I—STAFF**Principal School Medical Officer**

W. Powell Phillips, O.B.E., M.R.C.S., L.R.C.P., D.P.H.

Deputy Principal School Medical Officer

Cecil W. Anderson, M.B., CH.B., D.P.H., T.D.D.

Senior Medical Officers

Helena J. Webster, B.Sc., M.B., B.CH., D.P.H.

Arlwyn H. Griffith, M.B., B.S., D.P.H.

School Medical Officers

Nancy K. Gibbs, M.R.C.S., L.R.C.P., D.P.H.

Jean W. Smellie, M.B., CH.B., D.P.H.

G. Edward Phillips, M.R.C.S., L.R.C.P., D.P.H.

R. M. Carmichael, M.B., CH.B.

N. Frank, M.B., CH.B., D.T.M., D.P.H.

Anne Guy, B.Sc., M.B., B.CH., D.P.H., D.C.H.

School Medical Officers (Part-time)

Joyce Grant, M.R.C.S., L.R.C.P.

Edith M. Davies, M.B., B.CH., D.P.H.

Margaret Parry, M.R.C.S., L.R.C.P.

Olwen J. Cummin, M.B., CH.B.

Douglas Harrett, M.B., B.CH.

Geoffrey Ireland, M.B., B.CH.

John T. Jones, M.B., B.CH.

Frances Marie Richards, B.Sc., M.B., B.CH., D.R.C.O.G., D.C.H.

(Joint appointment with Welsh National School of Medicine 1.9.55)

N.B.—All school medical officers undertake duties for the Local Health Authority and the Education Committee. The time devoted by them to the School Health Service is equivalent to six and a half whole-time medical officers.

Visiting Specialist Medical Officers

(Under arrangements made with the Welsh Regional Hospital Board)

Rupert Parry, M.D., B.S., F.R.C.S., Ophthalmic Surgeon

A. O. Parker, M.D., Orthopaedic Surgeon

Hector A. Thomas, F.R.C.S., Aural Surgeon

Professor A. G. Watkins, M.D., F.R.C.P., Professor of Child Health

School Dental Service

Principal School Dental Officer.— W. A. Sutherland, L.D.S.

School Dental Officers

D. W. Elliot, L.D.S.
 C. N. Howitt, L.D.S.
 J. W. Lewis, L.D.S.
 H. V. Newcombe, L.D.S.
 J. McFarlane, L.D.S., L.R.C.P. & S., F.D.S. (HON.)
 D. J. Andrews, L.D.S.
 A. Jeffries (half-time)
 T. Bassett-James, L.D.S. (part-time)
 Miss E. M. Merrifield (half-time)

(All dental officers also undertake services for expectant and nursing mothers and young children. The time devoted to the School Dental Service is equivalent to 6.5 whole-time dental officers).

Consultant Orthodontist

Peter J. Blyth, D.ORTH.R.C.S., L.D.S., R.C.S.
 (Devotes one session per fortnight). Resigned 31.12.56

Eight Dental Clerk/Attendants

(Time devoted to School Dental Service is equivalent to 6.6 dental clerk/attendants)

Nursing Staff

Superintendent Health Visitor.—Miss N. M. Osmond.
 (One-third time devoted to School Health Service)

Deputy Superintendent Health Visitor.—Miss M. J. Price.
 (One-sixth time devoted to School Health Service)

Fifty-two Health Visitors.—Time devoted to School Nursing duties equivalent to 12½ nurses.

Five Clinic Helpers.—Time devoted to School Health Service is equivalent to 2 clinic helpers.

Speech Therapy

Head Speech Therapist.—Miss B. M. R. Morris, L.C.S.T.

Speech Therapists.—Miss Shelagh Collins, L.C.S.T. (Resigned May, 1956), Miss Muriel Smith, L.C.S.T. (Resigned September, 1956), Miss Margaret I. Newman (Commenced September, 1956), Mrs. T. G. Meade, part-time (Commenced October, 1956).

Orthoptic Clinic

Orthoptists.—Miss Joyce Pinnick, Central Clinic.
 Miss J. McClement, Canton Clinic (commenced April, 1956).
 (85% of time of Clinic is devoted to schoolchildren).

Orthopaedic Clinic

Superintendent Physiotherapist.—Mrs. A. M. Coggan, C.S.M.M.G.

Two Physiotherapists.—Mrs. K. N. Jenkins, M.C.S.P., Miss M. G. Jones, M.C.S.P.
(50% of time of Clinic is devoted to schoolchildren)

(Transferred to Cardiff Hospital Management Committee, 1.7.56)

Child Guidance Clinic

Psychiatrist.—Dr. Gaynor Lacey, M.B., B.S., D.P.M.

Psychologist.—Robert Robertson, M.A., B.ED.

Psychiatric Social Worker.—Miss Frances Meredith.

Secretary.—Miss C. J. Sergeant.

Peripatetic Teacher of the Deaf

Mrs. M. E. Aanensen, B.A.

Administration

Principal Administrative Assistant.—A. E. Brain (Part-time)

Administrative Officer.—P. H. Williams (Part-time)

Administrative Assistant.—A. K. Jenkins (Full-time)

Clerical Assistants.—15.

II—MEDICAL INSPECTION

The average numbers of schoolchildren and the average attendance for the year ended March, 1956, were as follows :—

	Average Number on Registers	Average Attendance
Grammar Schools	5,207	4,937
Secondary Modern Schools ..	7,328	6,600
Other Secondary Schools ..	414	395
Primary and All Age Schools ..	28,446	25,546
Special Schools	306	257
Severn Road Nursery School ..	100	82
TOTAL ..	41,801	37,817

The numbers of schoolchildren inspected at periodic medical inspections at schools during 1956 were as follows :—

GROUP	Boys	Girls	Total
PRESCRIBED GROUPS :—			
First Age Group (within 12 months of admission) ..	1,999	1,851	3,850
Second Age Group (at 10 plus years) ..	1,255	1,227	2,482
Third Age Group (at 14 plus years—Secondary Schools)	1,223	999	2,222
Third Age Group (at 15 plus years—Grammar Schools)	478	341	819
TOTAL ..	4,955	4,418	9,373
OTHER PERIODIC GROUPS :—			
Entrants to Grammar Schools	84	52	136
Special Schools	161	137	298
TOTAL ..	245	189	434
GRAND TOTAL	5,200	4,607	9,807

The number of schoolchildren specially inspected and the number of re-inspections undertaken were as follows :—

				Boys	Girls	Total
Special Inspections	{	At School	.. ..	99	58	157
		At School Clinic	.. ..	1,636	1,602	3,238
TOTAL ..				1,735	1,660	3,395
Re- inspections	{	At School	.. ..	553	440	993
		At School Clinic	.. ..	984	939	1,923
TOTAL ..				1,537	1,379	2,916

III—FINDINGS OF MEDICAL INSPECTION

The following table shows the number of individual children found at periodic medical inspection to require treatment (excluding defects of nutrition, uncleanness and dental disease) :—

	Found to require treatment for			
	Defective Vision	Other Conditions	Total Individual Pupils	Percentage
PRESCRIBED GROUPS :—				
First Age Group	78	692	745	19.4
Second Age Group	139	294	410	16.5
Third Age Group—Secondary Schools ..	144	138	265	11.9
Grammar Schools ..	41	44	80	9.8
TOTAL ..	402	1,168	1,500	16.0
OTHER PERIODIC INSPECTIONS :—				
Entrants to Grammar Schools ..	9	13	21	15.4
Special Schools	12	23	34	11.4
TOTAL ..	21	36	55	12.7
GRAND TOTAL	423	1,204	1,555	15.9

The percentages of children found to require treatment showed a decrease in all age-groups. Defective vision, squint and other eye defects formed a third of the total defects requiring treatment.

The defects found by the medical inspection of 9,807 children at the periodic medical inspections were as follows :—

Code No.	DISEASE OR DEFECT	PERIODIC INSPECTIONS					
		ENTRANTS		LEAVERS		TOTAL —ALL GROUPS	
		Requiring Treat- ment	Requiring Observa- tion	Requiring Treat- ment	Requiring Observa- tion	Requiring Treat- ment	Requiring Observa- tion
4	SKIN :—						
	Ringworm—Scalp ..	—	—	—	—	—	—
	Body ..	—	—	—	—	—	—
	Seabies ..	1	—	—	—	1	—
	Impetigo ..	—	—	—	—	—	—
	Other ..	44	64	23	30	107	130
5	EYES :—						
	Vision ..	78	266	185	122	423	623
	Squint ..	22	52	12	7	48	91
	Other ..	3	15	8	15	17	56
6	EARS :—						
	Hearing ..	34	59	9	12	55	92
	Otitis Media ..	53	64	6	8	69	94
	Other ..	7	19	2	9	13	35
7	NOSE OR THROAT ..	183	360	24	25	254	504
8	SPEECH ..	35	68	5	8	55	93
9	CERVICAL GLANDS ..	68	201	1	12	77	269
10	HEART & CIRCULATION ..	24	65	18	25	52	132
11	LUNGS ..	57	129	8	22	91	224
12	DEVELOPMENTAL :—						
	Hernia ..	7	22	2	3	14	30
	Other ..	26	49	9	9	47	117
13	ORTHOPAEDIC :—						
	Posture ..	11	24	13	34	33	125
	Flat Foot ..	132	131	22	27	192	243
	Other ..	100	163	23	53	172	313
14	NERVOUS SYSTEM :—						
	Epilepsy ..	2	22	—	1	5	27
	Other ..	12	8	—	—	21	21
15	PSYCHOLOGICAL :—						
	Development ..	5	10	—	1	10	28
	Stability ..	11	36	—	2	14	62
16	ABDOMEN ..	6	1	2	2	12	4
17	OTHER DEFECTS & DISEASES	33	34	17	16	83	66

The defects found by the medical inspection of 2,916 children at special inspections and re-inspections were as follows :—

Defect Code No. (1)	DEFECT OR DISEASE (2)	SPECIAL INSPECTIONS	
		Requiring Treatment (3)	Requiring Observation (4)
4	SKIN :—		
	Ringworm—Scalp ..	—	—
	Body ..	3	—
	Scabies ..	—	—
	Impetigo ..	10	—
	Other ..	146	24
5	EYES :—		
	(a) Vision ..	89	46
	(b) Squint ..	3	3
	(c) Other ..	15	3
6	EARS :—		
	(a) Hearing ..	9	7
	(b) Otitis Media ..	7	1
	(c) Other ..	9	2
7	NOSE AND THROAT ..	289	118
8	SPEECH ..	25	13
9	LYMPHATIC GLANDS ..	7	28
10	HEART ..	4	20
11	LUNGS ..	11	30
12	DEVELOPMENTAL :—		
	(a) Hernia ..	3	8
	(b) Other ..	2	8
13	ORTHOPAEDIC :—		
	(a) Posture ..	9	9
	(b) Feet ..	37	46
	(c) Other ..	89	46
14	NERVOUS SYSTEM :—		
	(a) Epilepsy ..	—	1
	(b) Other ..	64	19
15	PSYCHOLOGICAL :—		
	(a) Development ..	8	7
	(b) Stability ..	5	3
16	ABDOMEN ..	4	5
17	OTHER ..	395	225

Physical Condition.—The following is a classification of the general condition of children medically inspected :—

AGE GROUPS	Number of Children Inspected	SATISFACTORY		UNSATISFACTORY	
		Number	Per- centage	Number	Per- centage
PRESCRIBED GROUPS :—					
First Age Group	3,850	3,763	97·7	87	2·3
Second Age Group	2,482	2,441	98·3	41	1·7
Third Age Group—Secondary Schools	2,222	2,207	99·3	15	0·7
Grammar Schools	819	816	99·6	3	0·4
TOTAL	9,373	9,227	98·4	146	1·6
OTHER PERIODIC GROUPS :—					
Entrants to Grammar Schools ..	136	136	100·0	—	—
Special Schools	298	250	83·9	48	16·1
TOTAL	434	386	88·9	48	11·1
GRAND TOTAL ..	9,807	9,613	98·0	194	2·0

ROUTINE SCHOOL MEDICAL EXAMINATIONS

VARIATIONS IN DIAGNOSTIC AND REFERRAL RATES BY SCHOOL MEDICAL OFFICERS

REPORT BY Dr. C. W. ANDERSON

The efficiency of the School Health Service has recently been criticised by certain Medical Officers to H.M. Forces and also by some paediatricians. This has followed the discovery of long standing physical abnormalities in adolescents and young adults which had not been recorded on school inspection cards, although as children, some of these had been examined by several school medical officers.

Departmental records and Ministry of Education reports have indicated in the past, widely divergent incidence-rates of defects found among school children in various areas of the country. Whether these variations are real and due to a higher incidence of actual disease in the different regions or are due to personal factors and the variability of medical standards of diagnosis is debatable.

In Cardiff during a few months of 1956, the figures obtained from the routine school medical inspections submitted by a number of the school medical officers on the staff were analysed. Wide variations were noted in the referral rates of defects found in the comparatively small number of children examined by the few school medical officers concerned.

Justifiable criticism of the survey may be made on the grounds that the total number of children was small ; that the social classes of the schools concerned varied ; and that the period of the survey was short. These may account for some of the variations in the rates elicited.

Nevertheless, superficial as the survey undoubtedly is, the need for enquiry into local standards of diagnosis, treatment and observation seems obvious.

If the comments made on the figures incorporated in the following tables appear to be a criticism of Cardiff's domestic frailties, their publication in this Annual Report may encourage some other authorities with similar problems to look into their affairs, with a view to "putting their houses in order" also.

TABLE I

School Medical Officer	Total number of children examined by each school medical officer	Group and number of children examined in each				Percentage of total examined referred for treatment	Percentage of total referred for observation
		Primary Entrants	Inter-mediates	Leavers	Grammar School Entrants		
A	332	142	6	169	15	18.4	42.5
B	528	200	12	301	15	7.2	6.8
C	401	110	24	257	10	10.2	15.7
D	260	92	16	152	0	14.2	24.6
E	89	17	30	42	0	12.4	20.2
F	378	119	41	195	23	12.4	33.3
G	606	381	42	167	16	32.2	18.5
H	134	68	0	66	0	14.9	23.1
I	190	13	31	128	18	9.5	14.1
J	273	93	27	138	15	15.0	19.4
K	203	0	15	168	20	12.8	17.2

Cipher (0) indicates no children examined in this group by S.M.O. concerned

This shows that the percentage of the children examined who were referred for **observation** of the defects found varied between the high figure of 42.5 in the case of Dr. "A" and 6.8 in Dr. "B's" cases. The recommendations of the other nine doctors concerned showed a wide scatter between these two extremes.

The cases referred for **treatment** show less divergence, but even here Dr. "G" considered that 32.2 per cent of the cases required treatment, whereas Dr. "B" only found 7.2 per cent in his series.

TABLE II

School Medical Officer	Percentage referred for treatment in group examined				Percentage of total referred for treatment	Percentage for observation in each group examined				Percentage of total referred for observation
	Primary Entrants	Inter-mediates	Leavers	Grammar School Entrants		Primary Entrants	Inter-mediates	Leavers	Grammar School Entrants	
A	19.7	0	17.7	20.0	18.4	57.0	33.3	30.8	40.0	42.5
B	5.0	0	9.3	0	7.2	10.0	0	5.0	6.6	6.8
C	11.8	1.7	9.3	0	10.2	18.2	12.5	14.8	20.0	15.7
D	16.3	0	14.5	0	14.2	23.9	0	27.6	0	24.6
E	11.8	10.0	14.3	0	12.4	11.8	10.0	31.0	0	20.2
F	7.6	1.5	15.4	8.7	12.4	44.5	34.1	23.1	60.9	33.3
G	33.9	26.2	28.7	43.8	32.2	20.7	16.7	13.2	25.0	18.5
H	16.2	0	13.6	0	14.9	30.9	0	15.2	0	23.1
I	0	12.9	7.8	22.2	9.5	38.5	25.8	10.9	5.6	14.7
J	23.7	7.4	9.4	20.0	15.0	39.8	11.1	8.0	13.3	19.4
K	0	20.0	12.5	5.0	12.8	0	20.0	14.9	15.0	17.2

The wide variations in the referral rates by the various school medical officers are shown here in each of the routine school inspection groups indicated.

Thus Dr. "B" found 5 per cent of the "primary school entrants" required **treatment** whereas the corresponding figure for Dr. "G" in the same group was 33.9 per cent.

In the "Intermediate" group the figure varies between 1.5 per cent in the case of Dr. "F" and 26.2 per cent in Dr. "G's" cases. Of the "Leavers," Dr. "B" referred 9.3 per cent and Dr. "G" 28.7 per cent. Grammar school entrants, in whom one might expect a more stable figure, showed that the percentages requiring treatment varied between 5 in the case of Dr. "K" and 43.8 in Dr. "G's" series.

This table also indicates that cases referred for **observation** of the defects found showed wide variations according to the examining school medical officer and the group under consideration. Here the peak figure for "primary entrants" was 57 per cent in the case of Dr. "A" and the lowest was recorded by Dr. "B" with only 10 per cent. Similarly, "intermediates" requiring observation varied between 34.1 per cent (Dr. "F") and 10 per cent (Dr. "E"), "leavers" between 31 per cent (Dr. "E") and 5 per cent (Dr. "B") and "grammar school entrants" between 60.9 per cent (Dr. "F") and 5.6 per cent (Dr. "I").

A significant fact which also emerges from this table is that it was not always the same medical officer who had a high or low referral rate throughout. This varied according to the group examined and whether the referral was for treatment or observation.

TABLE III

School Medical Officer	Percentage in each Group referred for Treatment in Survey				Percentage referred for treatment in survey. All groups combined
	Primary Entrants	Inter-mediates	Leavers	Grammar School Entrants	
A	19.7	0	17.7	20.0	18.4
B	5.0	0	9.3	0	7.2
C	11.8	1.7	9.3	0	10.2
D	16.3	0	14.5	0	14.2
E	11.8	10.0	14.3	0	12.4
F	7.6	1.5	15.4	8.5	12.4
G	33.9	26.2	28.5	43.8	32.2
H	16.2	0	13.6	0	14.9
I	0	12.9	7.8	22.2	9.5
J	23.4	7.4	9.4	20.0	15.0
K	0	20.0	12.5	5.0	12.8
Percentage of all Children referred by all S.M.O.s for whole of year 1956					
	19.4	16.5	11.9	15.4	15.9

Cipher (0) indicates that no children were examined in this group by the S.M.O. concerned

This shows in the last line across the annual percentages of cases referred for treatment in each inspection group for all routine school inspections carried out during the whole of 1956 by all school medical officers on the staff. It affords an opportunity of comparing them with the percentages referred by medical officers during the shorter period of the actual survey.

The wide variations between the findings of the medical officers concerned and the differences between their individual referrals as compared with the annual average figures are again noticeable.

TABLE IV

School Medical Officer	Total Children Examined	Number of specified Defects requiring Treatment and for Observation											Other
		Skin	Eyes	Ears	Nose and Throat	Speech	Glands	Heart	Lungs	Developmental	Orthopaedic	Nervous and Psychological	
A	332	16	60	23	45	8	8	8	11	14	77	10	3
B	528	2	37	7	7	1	1	1	7	4	15	0	1
C	401	8	61	13	7	11	0	0	6	0	6	1	8
D	260	9	43	4	11	2	1	6	6	2	26	1	12
E	89	3	6	4	5	0	4	0	0	1	6	0	1
F	378	11	91	12	27	7	21	7	6	13	51	9	1
G	606	20	65	43	67	11	24	16	29	34	91	10	2
H	134	3	15	1	11	1	5	1	4	1	12	1	7
I	190	5	17	5	4	1	6	0	2	2	5	0	1
J	273	1	46	9	21	2	24	2	1	1	16	9	2
K	203	1	5	5	3	0	3	12	3	2	9	0	0

The various defects discovered by the different school medical officers and referred for treatment and/or observation are shown in this table. Allowing for the difference in the numbers examined by each individual officer, the findings and opinions on the need for referral and/or observation show wide ranges.

Thus Dr. "F" considered that 91 visual defects required observation or treatment, whereas Drs. "B" and "G" each with a much larger number of children examined, only referred 37 and 65 respectively.

In the defects of the Ear, Nose and Throat, Dr. "B" referred 14 defects for observation or treatment out of 528 children seen, whereas Dr. "G" referred 110 from the somewhat higher number of 606. No cases of enlarged glands worthy of note were found by Dr. "C" but in a much smaller number of children Dr. "J" recommended 24 for treatment and/or observation.

Similarly, Drs. "I," "J" and "K" in a total of 666 children examined between them discovered heart and/or lung abnormalities in only 20 instances, but Dr. "G" recorded 45 defects of the same organs in the smaller total of 606 children inspected. Dr. "C" reported 6 orthopaedic defects in 401 children, but Dr. "A" reported 77 in 332 children, and Dr. "G" 91 in 606.

Brief Comments on the Survey.

A few of the questions which appear to arise from this brief analysis of the figures shown in these tables are :—

- (a) If such wide variations in the findings of other school medical officers in other Education Authorities are common, is it possible to prepare accurate figures of the type indicated for the country as a whole ?
- (b) Is it possible to compare defects found in the children in widely different L.E.A. areas when there is such divergence of opinion in the relatively small staff of one such Authority ?
- (c) Do the Annual Reports of Principal School Medical Officers reveal a true picture of the health of the school child ?
- (d) Is standardisation, at least of the more significant and incapacitating abnormalities possible among all L.E.A. medical staffs ?
- (e) Does the recording of minor defects of no real significance to the subsequent health of the child give a false impression of the true physical or mental state of the school child in the various areas compared ?
- (f) Does unnecessary recording and observation of minor defects impair the efficiency of the service by interfering with the facilities for more profitable treatment of potentially more serious defects ?
- (g) Do some medical officers, as a result of their enthusiasm to discover and treat a particular defect in which they are interested, either fail to recognise or tend to minimise the significance of a potentially more important defect ?

The answers to these questions and many others affecting the assessment of the defects discovered in school children must be found by Principal School Medical Officers and their staffs if the criticisms of the efficiency of the School Health Service are to be met.

IV—" FOLLOWING-UP " AND THE WORK OF HEALTH VISITORS

A summary of the work of the health visitors in connection with domiciliary visitation is given in the following table :—

Visits re	Total
Defects of vision	716
Defects of teeth	156
Defects of ear, nose and throat	283
Other defects and diseases	1,236
Scabies	23
Nursery School Pupils	432
TOTAL ..	2,846

The following is a summary of work done by the visitors in connection with uncleanliness during the year :—

Number of :—

Special visits to schools	861
Examinations of children for uncleanliness	101,594
Children found with vermin and/or nits	3,020
Children found to be free from vermin and nits on re-examination	1,501
Children for whom cleansing notices issued	2,519
Children for whom cleansing orders issued	236

Health Visitors paid 1,362 routine and special visits to schools to inspect and follow up children reported to require treatment.

Health Visitors Survey of the Intermediate Group.—In addition to periodic medical inspection, pupils in primary schools are inspected at the age of eight years by Health Visitors. The number of pupils inspected and re-inspected by Nurses during the year was 2,332 (1,200 boys and 1,132 girls) 282 of these children were found to have defects requiring treatment, and 92 pupils were reported to be infected and 57 were bodily unclean.

The physical condition of the pupils inspected was classified as follows :—

	<i>Number</i>	<i>Percentage</i>
Satisfactory ..	2,096	97·2
Unsatisfactory ..	60	2·8

Silver Jubilee Camp School, Porthcawl.—Each child is inspected by a Health Visitor before travelling to the Camp, mainly to reduce the risk of infection and the spread of verminous conditions, but also to prevent any child attending who may have become unfit since selection. 55 visits were paid to schools during the year to undertake such inspections.

V—TREATMENT

Particulars of the treatment of minor ailments, defective vision and squint, external eye diseases, defects of ear, nose and throat, of orthopaedic and postural defects, dental defects, etc., are given in the following tables :—

(a) *Minor Ailments*

DISEASE OR DEFECT	Number of Defects treated or under treatment during the year under the Authority's Scheme	Total number of attendances at Clinics
SKIN :—		
Ringworm—Scalp	—	
Body	6	
Scabies	27	
Impetigo	130	
Other Skin Diseases	135	
MINOR EYE DEFECTS	86	
MINOR EAR DEFECTS	12	
MISCELLANEOUS (<i>e.g.</i> , minor injuries, bruises, sores, chilblains, etc.)	1,049	
TOTAL	1,445	6,488

(b) *Defective Vision and Squint*

Particulars of the work of the Ophthalmic Clinics during the year are given below :—

Number of children examined ..	5,069
Errors of Refraction	3,834
† Spectacles prescribed	3,473
Other defects or diseases treated ..	96
Referred to Orthoptic Clinic	254
Attendances at Clinics	10,158

† There was no change in the prescription in 470 refractions.

Spectacles are supplied through the Supplementary Ophthalmic Service of the National Health Service. The total number of spectacles provided by this Service for school children during the year was 2,189.

Ophthalmic Operations.—Five operations were performed during the year by the Ophthalmic Surgeon and no further cases were on the waiting list at the 31st December. Orthoptic operations are reported in the statistical table for the Orthoptic Clinic.

The Orthoptic Clinic.—It is pleasing to record that the Orthoptic Clinic at the Canton School Clinic was re-opened in April, 1956, on the appointment of Miss J. McClement as the second Orthoptist. As it had been previously suspended for an indefinite period, it took some time to re-organise its activities.

The work of the Clinics is recorded in the statistics which follow this note. Almost double the number of new patients have been taken on for orthoptic treatment this year compared with 1955. In addition there has been a considerable increase in the number of children referred by Glamorgan Principal School Medical Officer. In August arrangements were made for operations to be performed on children from the Glamorgan area. Thirty-eight children were referred under these arrangements for orthoptic treatment combined with an operation, for cosmetic operations or purely for orthoptic treatment. Ten of these required operative treatment but the waiting list is not heavy and the waiting period for operations varies between eight and twelve weeks.

In order to deal with the greatly increased number of new cases referred during the year, it was necessary to concentrate on those who were quite co-operative and to discharge those who were persistently bad in their attendance at the Clinic. For this reason the number of patients discharged as "failed to attend" is larger than is usual.

Statistics relating to the work of the Orthoptist at Central clinic during 1956 are as follows :—

<i>New patients accepted for treatment (including 38 from Glamorgan)</i>					406
<i>Patients discharged—</i>					
With Single Binocular vision (16 without operation)					29
Cosmetically straight (4 without operation)				..	44
Improved (29 without operation)			..	..	46
					<hr/> 119 <hr/>
No improvement	..	..	..	..	5
No co-operation	..	..	..	..	10
Refused treatment (occlusion, operation, etc.)				..	14
Failed to attend for treatment	..		..	..	109
Left Cardiff	..	..	..	..	5
Intractable Amblyopia		..	..	..	10
No need for treatment	..	..	..	..	10
Referred to Cardiff Royal Infirmary		..	..	..	4
					<hr/> 167 <hr/>
TOTAL DISCHARGED	..		..	..	<hr/>286 <hr/>

Patients under treatment at end of 1956 :—

Regular weekly or bi-weekly treatment	..	..			43
Having monthly occlusion	..	..	..		79
Under supervision awaiting operation	..		..		14
Reporting two to six monthly until old enough for treatment	..	..	..	..	59
Under supervision between courses of treatment	..				474
TOTAL	..	..	..	..	<hr/>669 <hr/>

Operations performed (Llandough Hospital—59)

(Children's E.N.T. Hospital—20) .. 79

Number on waiting list for operations .. 14

Number of attendances .. 4,862

(c) *Defects of Ear, Nose and Throat*

	EAR	NOSE AND THROAT	
		Tonsils and Adenoids	Other Defects
Received Operative Treatment ..	31	1,229	47
Received Treatment in Hospital ..	118	—	
Received other forms of treatment	173	114	
Total number of children examined	404	1,390	
Attendances at Clinics ..	836	2,648	

Waiting list for Operative Treatment at 31st December, 1956

Tonsils and Adenoids—Urgent ..	314	
Ordinary ..	183	
	—	497
Other ear, nose and throat conditions ..	..	4
		—
TOTAL ..	501	

(d) *Orthopaedic and Postural Defects*

The Orthopaedic Clinic held at the St. David's Hospital became the responsibility of the Hospital and Specialist Service on the introduction of the National Health Service. The Authority has continued to administer the clinic as an agent of the Welsh Regional Hospital Board, but on the 1st July, 1956, the administration of the clinic was transferred to the Cardiff Hospital Management Committee.

The report of the work of the clinic has accordingly been deleted but information has been received that 1,281 pupils were examined and treated during the year at the clinic.

(e) *Heart Disease and Rheumatism*

The following is a record of the supervisory work carried out during the year at the Rheumatism Clinics :—

Cases remaining under supervision at beginning of year	319
New cases attending	98
Cases discharged from supervision on leaving school ..	34
Other cases who ceased to be supervised :—	
Left Cardiff	2
Died	—
Discharged not suffering from Rheumatism ..	16
Transferred to Private Practitioners and to other clinics	6
Ceased to attend	24
Cases remaining under supervision at end of the year ..	335
Total attendances at routine Rheumatism Clinics ..	792
Routine Clinic Sessions	58
Average attendance at routine clinic sessions ..	13.7
Average number of new cases at routine clinic sessions ..	1.7

The following table shows the condition of the heart in the 34 cases that ceased to remain under supervision on leaving school :—

					<i>On Ascertainment</i>	<i>On Discharge</i>
Normal	..	..	..	..	13	19
Minor Heart Manifestations			..	..	14	9
Major Heart Manifestations			..	..	7	6

The types of heart diseases present in the 6 cases having major heart manifestations on discharge were as follows :—

Mitral Disease (probably incompetence)					2
Mitral and aortic	..	..	..		1
Congenital	..	..	..		3
Congenital-Rheumatism	..	..			—
				TOTAL	6
					—

One Congenital Heart on Ascertainment had operation for Patent Ductus and was discharged Normal.

One Congenital Heart and Septal Defect on Ascertainment did not have operation, and was Congenital on Discharge.

Treatment of this disease in hospital is still provided at Lord Pontypridd Hospital (Dulwich House) through arrangements with the United Cardiff Hospitals. A close link is maintained with the School Health Service as the Deputy Principal School Medical Officer continues to act as Medical Superintendent and Professor A. G. Watkins of the Department of Child Health holds a Rheumatism Clinic for schoolchildren at the Cardiff Royal Infirmary.

(f) *Radiography*

The children referred for radiography were x-rayed at the Orthopaedic Clinic which is now administered by the Cardiff Hospital Management Committee.

(g) *Enuresis*

The Special Clinic held by Dr. E. M. Davies, for the treatment of children who suffer with enuresis, has continued its work during the year, 223 children having been treated. Attendances for treatment numbered 970.

(h) *Special Clinic for girls at Puberty*

Dr. E. M. Davies has undertaken special clinics for girls sent to her from schools and clinics for advice and treatment on complaints of special significance at this age period.

(i) *Cleansing*

(a) *Cleansing of children with unclean heads.*—It will be noted that the report of the work of the Health Visitors refers to the cleansing inspections which are undertaken each term in schools. Continual infestation of certain pupils is common in a number of families and it is also noted that certain schools show a considerably higher incidence than others. Every effort is made to ensure that children whose heads are unclean are cleansed at home by the parents. A small proportion for various reasons remain unclean in spite of advice given to parents and such children are sent for cleansing at the Cleansing Station. If this opportunity is not taken by the parents the Authority may proceed against them in the Court under the provisions of the Education Act of 1944. During the year 236 children attended the school clinic or station for such cleansing, but it was not necessary to seek any further powers to secure the cleansing of any child.

(b) *Treatment of Scabies*.—Whilst scabies is no longer a problem of the same dimensions as was encountered during the war years, measures are necessary to secure effective treatment of the smaller numbers of persons who become infected. The Department's Cleansing Station, which is staffed as required by clinic helpers, is available for the treatment of adults and children. A summary of the work of the station during the year is as follows :—

Number of cases treated :—

Schoolchildren	..	..	17
Children under school age	..	..	14
Adults	..	..	31
			<hr/>
TOTAL	..	..	62
			<hr/>

Attendances for treatment :—

Schoolchildren	..	..	49
Children under school age	..	..	38
Adults	..	..	60
			<hr/>
TOTAL	..	..	147
			<hr/>

(c) *Miscellaneous*.—47 other persons attended for baths for various reasons.

VI—SCHOOL DENTAL SERVICE

Report for the year 1956 of

Mr. W. A. SUTHERLAND, L.D.S., R.C.S., Principal School Dental Officer

The School Dental Service is still faced with the same two problems—increased incidence of dental caries and shortage of staff, especially full-time permanent officers.

The increase in dental caries is noticeable in all age groups, pre-school children included. Many more children are obtaining treatment (although not always complete treatment) from the General Dental Service, the increase being most noticeable in the grammar schools, and varying according to the area of the City chosen for residence. Certain districts are well catered for by dental surgeons in private practice, but generally speaking, the industrial areas are neglected. Nevertheless, even with this help, the School Dental Officer is still faced with the problem of providing treatment for the vast majority of the school population.

This extract from the Health of the School Child 1950–1951 is well worth recording :—

“The purpose of the School Dental Service is to provide a comprehensive service of regular inspection and treatment of school children—an essential feature of any scheme for the conservation of the teeth. The most effective way of ensuring that the maximum number of children obtain regular treatment is the provision of a dental service which is closely associated with the educational system. Inspections and treatment are then accepted, in company with other children, as a part of the school routine: moreover, the influence of the teachers, undoubtedly the greatest single factor influencing the attitude of school children towards dentistry, is likely to be more effectively exercised when the dental service is organised in this way. There is a difference of approach between a private dentist and a school dental officer; the former is concerned with the treatment of those individuals who are sufficiently enlightened to seek his services, while the latter bears responsibility for the dental well-being of the school population at large.”

The staffing position showed a fractional improvement over last year, the strength in terms of full-time officers being $8\frac{1}{11}$, out of an establishment of nine. This was brought about by one of the half-time officers returning to the service in a full-time capacity. Otherwise the position remains as in 1955 :—

- 5 Full-time Permanent Officers
- 2 Full-time Temporary Officers
- 2 Half-time Temporary Officers
- 1 Part-time Temporary Officer

I would like to record my grateful thanks to the temporary officers for their ready acceptance, at considerable inconvenience to their private arrangements, of the necessary alterations in days of attendance and change of clinics on more than one occasion during the year, owing to unavoidable absence of certain members of the permanent dental staff.

In view of the high average age of the dental staff, however, the number of sessions lost through illness was not excessive. Following the policy of last year, numerous advertisements were inserted in the local Press and in the British Dental Journal in efforts to obtain additional staff, but these produced no better results—no replies were received.

Reliance on temporary dental officers over 67 years of age to continue the present service is a matter of grave concern for the future.

Cardiff is by no means alone, however, in having a staffing problem—it is nation-wide, as is shown in the results of an enquiry carried out this year.

The Principal Dental Officer of the West Riding of Yorkshire circulated a questionnaire to 62 Principal Dental Officers and received replies from 61. I am indebted to him for a summary of the returns.

- (1) Response to recent advertisement for Dental Officers—52 reported “Poor or Nil.”
- (2) Authorities having the authorised establishment of dental officers—2.
- (3) The number of children per dental officer in the various local authority services showed wide variation, ranging between one dental officer to 2,500 children and one to 19,000 children.

The average for the whole country was one to 6,500 and the figure for Cardiff, one to 5,000.

The Ministry considers that in order to provide a reasonably comprehensive service a dental officer should not be responsible for the care of more than 3,000 school children.

Some local authorities, in the hope of attracting dental officers are now offering housing accommodation with their new appointments, while others permit their officers to engage in private practice, under certain conditions.

Report of the Committee on Recruitment to the Dental Profession

The report of this Committee under the Chairmanship of Lord McNair was published in October, 1956. Their conclusions and recommendations are of interest and some of them may be summarised as follows :—

- (1) In the current academic year practically all places available for entrants to the dental schools have been filled.
- (2) In the next 10 years some 8,000 names will be lost to the Dentists' Register due to retirement and death.
- (3) To make good this loss, 800 new dentists will be required annually for the next 10 years and as the failure rate is some 10 per cent, and as many dentists will leave this country to practise abroad, this would necessitate an annual intake of 1,000 students, until there are 20,000 dentists on the register.
- (4) The present maximum intake of students to the schools is 645 each year.
- (5) Accommodation can be obtained by enlarging existing schools and by the foundation of completely new schools.
- (6) There are very marked limitations to the capacity for expansion of the existing schools. There are 15 dental schools in Great Britain, all of which have been in existence for 50 years or more.

(Professor F. C. Wilkinson, speaking at the Royal College of Surgeons, England, pointed out that though increased recruitment was necessary, the provision of adequate accommodation and facilities for teaching was more urgent still, “Quite apart from the fact that additional schools were required, half the present ones were so old and decrepit that they needed to be rebuilt.”)

- (7) Regarding the dental school in Wales, it is noted that from the standpoint of potential dental manpower this region is largely unexploited so that there is obvious advantage in expediting the building of this school.
- (8) A comprehensive national programme of dental health education be set up by a standing committee.
- (9) Attention be directed to the suitability of dentistry as a profession for women.
- (10) Inquiry into means whereby effective help can best be made available for suitable candidates for dental schools, who, under the present arrangements, are unable to accept grants from State or local authorities because parental contributions necessary under the present rules cannot be found.
- (11) That the foundation of a dental school in the University of Wales to accommodate permanently an annual intake of at least 50 students should be expedited.

It is worthy of note that the Committee under Lord Levison reported their final report in 1946, made many somewhat similar observations and recommendations. An extract from paragraph (65) reads:—

“So far as the University of Wales is concerned, we have formed the impression that favourable consideration would be given to the establishment at Cardiff of complete courses of training for a degree in dentistry, to include the setting up of a clinical department within the medical school, provided that the University is enabled to meet the expenditure involved.” And again, “We gather, however, that on account of a shortage of teaching staff and accommodation, it may be some years before a school could be established in Cardiff; nevertheless, we have no hesitation in recommending that the matter should be explored as soon as possible.”

On 21st December, 1956, the Parliamentary Secretary to the Ministry of Health, in the course of her reply in a debate in the House of Commons, stated that this matter of extension of existing dental schools or the building of new ones was a matter where one set the capital expense involved against other priorities in the Health Service.

Plans were already in hand to enlarge the Birmingham Dental Hospital so as to provide teaching accommodation for an additional 35 students a year.

The Dentists Act, 1956

This Act became law on 15th March, 1956, and came into force under an order in Council on 4th July, 1956.

The sections which affect Local Authority Dental Services were commented on in my report for 1955.

New Clinic at Fairwater

This clinic, which will have a complete dental suite and be manned by a dental officer on half-time duty, is now near completion and will be in operation early in 1957. It is of pleasing design and decoration, is furnished with up-to-date equipment and should serve the neighbourhood well. The dental section consists of a surgery (16 ft. x 12 ft.) and a recovery room (11 ft. x 10 ft.).

The surgery equipment is the most up-to-date obtainable and includes a Sterling Unit (comprising electric engine, cuspidor, bracket table, water heater, suction apparatus and burner), a Sterling dental chair and operating stool, a shadowless operating light, a Walton No. 4 nitrous oxide and oxygen apparatus, etc. all being finished in ivory tan enamel.

I am indebted to Mr. Gammon, a member of the Education Architects' Department, for many helpful suggestions and for his unfailing readiness to incorporate any features which the dental staff considered desirable in the construction of the dental section, and the installation of the various services.

Orthodontia

Mr. Peter Blyth, D.ORTH., L.D.S., who had been on the staff since April, 1955, as a part-time orthodontist, resigned from his appointment in December, 1956.

His place will be taken by Mr. E. Kennedy, D.ORTH., B.D.S., who will commence duty in January, 1957, and will devote two sessions per week to his speciality at College Farm Clinic.

This increase in the number of sessions for cases requiring treatment from a specialist should reduce the long waiting list of children requiring such treatment and eventually enable new cases to be referred to this clinic.

The public interest in this highly specialised branch of dentistry increases year by year, both in the Local Authority Service and in the general dental service. In the latter service the cost in fees for such treatment rose from £575,000 in 1952 to £1,019,000 in 1955. It is estimated that 15 per cent of all school children require, and would benefit from, some form of orthodontic treatment.

Before orthodontic treatment is undertaken for any child it is essential to ensure that both parent and patient will co-operate to the fullest extent. The treatment is, except for very simple cases, of a prolonged character, the construction of the complex appliance is expensive, as is also the orthodontist's time spent in the diagnosis, the planning of treatment and the repeated visits necessary for a successful result.

In few branches of dentistry does successful treatment earn for the dental officer or the orthodontist such unstinted gratitude from parent and child alike.

It must be emphasized, however, that a dental officer who has not attended a prolonged post-graduate course in orthodontia must of necessity confine his efforts to correcting the more simple forms of irregularities of the teeth, and that he should be in a position to be able to refer all complex cases to an orthodontic specialist, who possesses the high degree of knowledge and skill which these cases demand.

The slight increase in staff during 1956 allowed an overall increase in the number of sessions available for dental inspection and treatment. Treatment sessions increased from 2,731 in 1955 to 3,116 in 1956. Sessions devoted to periodic inspections in schools rose from 79 to 106.

The number of operations carried out consequently showed a considerable increase in all items of treatment.

Regarding inspections at schools, the interval between each inspection is still too long, but as pointed out in *The Health of the School Child* under "Conditions of a Satisfactory School Dental Scheme," "The interval between dental inspection and the commencement of treatment should be as short as possible."

To inspect more children than can be treated within a few weeks is apt to mislead parents. On hearing that their children have had a dental inspection recently, delay in receiving notification that they require treatment may give them the impression that all must be well and may even be the means of delaying a visit to the family dentist.

The number of "Specials" inspected is high, but many of these cases are children who are regular attenders and have been instructed to apply for an appointment every 6 months in order that any defects may be remedied while still of a minor character.

The full statistical table of the school dental work carried out during 1956 is as follows :—

(1) Number of Children inspected by the Dentists :—					
	(a) Periodic Age-groups	..	..	17,756	
	(b) Specials	..	..	6,257	
	TOTAL	..	..	24,013	
(2) Requiring Treatment					
	..	..	..	..	17,906
(3) Offered treatment					
	..	..	..	..	11,353
(4) Actually treated					
	..	..	..	..	10,563
(5) Attendances made by children for treatment					
	..	..	..	..	24,301
(6) Half-days devoted to :—					
	Inspection	..	..	..	106
	Treatment	..	..	..	3,116
	TOTAL	..	..	—	3,222
(7) Fillings :					
	Permanent Teeth	..	..	..	11,879
	Temporary Teeth	..	..	..	540
	TOTAL	..	..	—	12,419
(8) Teeth Filled :					
	Permanent Teeth	..	..	..	11,190
	Temporary Teeth	..	..	..	528
	TOTAL	..	..	—	11,718
(9) Extractions :					
	Permanent Teeth	..	..	..	4,069
	Temporary Teeth	..	..	..	13,652
	For Regulation purposes (permanent)	..	..	..	409
	For Regulation purposes (temporary)	..	..	..	570
	TOTAL	..	..	—	18,964
(10) Administrations of general anaesthetics for extractions					
	..	..	..	..	9,494
(11) Other operations—Permanent Teeth :—					
	(a) Scalings	..	..	..	895
	(b) Cleanings	..	..	..	1,046
	(c) Dressings	..	..	..	913
	(d) Root Fillings	..	..	..	18
	(e) X-rays	..	..	..	104
	(f) Crowns	..	..	..	8
	(g) Gum Treatments	..	..	..	448
	TOTAL	..	..	—	3,432
	Temporary Teeth	...	..	..	469
(12) Number of pupils supplied with artificial dentures					
	..	..	..	..	164

(13) Orthodontics :—

			<i>By Consultant Orthodontist</i>	<i>By Dental Officers</i>
(a)	Cases commenced during the year	..	14	250
(b)	Cases carried forward from previous year		13	142
(c)	Cases completed during the year	..	3	103
(d)	Cases discontinued during the year	..	—	24
(e)	Pupils treated with appliances	..	14	250
(f)	Removable appliances fitted	.. ..	22	263
(g)	Fixed appliances fitted	.. ..	—	10
(h)	Total attendances	.. ..	158	2,191
(i)	Referred back to Dental Officer with advice		7	—
(j)	Referred for X-ray	.. ..	3	—
(k)	Under observation only	.. ..	8	—
(l)	Partly treated and referred back to Dental Officer	.. ..	3	—
(m)	Awaiting Inspection	.. ..	48	—

VII—HANDICAPPED PUPILS

The numbers of handicapped pupils known to the department at 31st December, 1956 are shown in the following table.

BLIND CHILDREN

At Residential Special Schools	..	8	
At no School	.. ..	—
TOTAL	..		8

PARTIALLY SIGHTED CHILDREN

At Special Classes for the Partially Sighted		14	
At Residential Schools	.. ..	4	
TOTAL	..		18

DEAF CHILDREN

At Residential Schools	.. ..	19	
At Independent Schools	.. ..	3	
TOTAL	..		22

PARTIALLY DEAF CHILDREN

At Residential Schools	.. ..	2	
At Independent School (Residential)	..	1	
At Maintained Schools (day)	.. ..	14	
TOTAL	..		17

CHILDREN SUFFERING FROM EPILEPSY

At Maintained Schools	.. ..	—
At Residential Schools	.. ..	2	
At no School	.. ..	—
TOTAL	..		2

CHILDREN SUFFERING FROM PULMONARY TUBERCULOSIS

At Special Schools	17
At Maintained Schools	103
At other Institutions	—
At no School or Institution	20
TOTAL ..	140

CHILDREN SUFFERING FROM NON-PULMONARY TUBERCULOSIS

At Special Schools	—
At Maintained Schools	68
At other Institutions	—
At no School or Institution	2
TOTAL ..	70

DELICATE CHILDREN (Children who by reason of impaired physical condition cannot without risk to their health be educated under the normal regime of an ordinary school)

At Special Day Schools	90
At Special Residential Schools, etc.	—
At no School	3*
TOTAL ..	93

* All these 3 children receive home tuition

PHYSICALLY HANDICAPPED CHILDREN

At Residential Special Schools	5
At Maintained Schools	2
At no School	8*
At Independent Schools	2
TOTAL ..	17

* All receive home tuition

EDUCATIONALLY SUB-NORMAL CHILDREN

At Special Day Schools	200
At Special/Residential Schools	3
At Maintained Schools	417
At Independent Schools	2
At no School or Institution	1*
TOTAL ..	623

* This child is receiving home tuition

MALADJUSTED CHILDREN

At Independent Schools	4
At Maintained Schools—in Residential Hostels	3
At Maintained Schools awaiting admission to Hostels or Special Schools	—
At no School or Hostel	1*
TOTAL ..	8

* This child is receiving home tuition

During the year 226 children, who had been reported as being handicapped pupils were specially medically examined, with the following results :—

Educationally sub-normal and suitable for education in a special school (day)	48
Educationally sub-normal and suitable for education in a residential special school	3
Educationally sub-normal—to have special educational treatment in an ordinary school	60*
Children for whom a decision regarding their capabilities has been deferred	14
Educationally sub-normal but do not require supervision after leaving school	3
Pupils of Gabalfa Special School for educationally sub-normal children :	
(a) Granted permission to leave before attaining the age of 16 years	1
(b) Recommended to return to ordinary school	6
(c) Recommended to remain at Gabalfa Special School until the age of 16 years	1

* 42 of these children were examined for special educational treatment in ordinary school by Educational Psychologist. Special Medical Examination was not considered necessary in these cases.

Pupils at Llanishen Court Special School for educationally sub-normal children recommended to return to ordinary school	2
Children transferred to the care of the Local Health Authority	48
Children transferred from care of Local Health Authority for special educational treatment at Special School	1
Children transferred from care of Local Health Authority and recommended for teaching in own home	1
Blind—for admission to a residential special school	2
Partially sighted—for special school or class	2
Deaf—for admission to a residential special school	3
Partially Deaf—for admission to a residential school	—
Physically handicapped—for admission to a special day school	9
Physically handicapped—recommended for Course of Training	5
Maladjusted—for admission to a residential Hostel or Special School	—
Epileptic—for admission to a residential special school	—
Recommended for Home Teaching	14

Forty-eight children were notified to the Local Authority during 1956 in accordance with Section 57 of the Education Act, 1944.

Greenhill Open-air School.—In addition to the above examinations, 46 children were found to be delicate pupils and recommended for admission to the Greenhill Open-air School. The average number of delicate children on the register during the year was 96, and the average attendance during the year was 75. Fifty-two children (25 boys and 27 girls) were admitted to the school, and 50 (27 boys and 23 girls) were discharged.

CHILDREN WITH DEFECTIVE HEARING

Ascertainment.—Head Teachers are encouraged to refer children who have difficulty in hearing to the visiting Health Visitor for testing of their hearing. Health Visitors are instructed to refer all children with defective hearing to the Ear, Nose, and Throat Clinics which are held regularly in each area school clinic. This instruction also applies to children under school age whom the Health Visitor sees at infant welfare centres or at home. In addition to the school clinics the Cardiff Hospital Management Committee have built and equipped an Out-Patient Department at their Children's Ear, Nose and Throat Hospital. This Department is a complete audiology centre, and a qualified audiometrician, Miss P. Theophilus, is available for audiometric testing of any children referred.

Treatment.—A Peripatetic teacher is employed full-time by the Education Authority to advise parents and visit pupils at any schools maintained by them to give lip-reading instruction, speech improvement lessons and training in the use of hearing aids. After a trial period of one year the Authority approved the scheme as permanent in view of the benefits brought to partially deaf children. The teacher is Mrs. Margaret Aanensen, B.A., who was sent by the Authority to take a one-year course at the Department of Education of the Deaf at Manchester University under Professor and Mrs. Orr-Ewing, in 1948-49. Mrs. Aanensen returned to Cardiff and was Headmistress of the Oral School for the Deaf until it was closed. Fourteen partially deaf children are being educated in day schools under these arrangements.

SPEECH THERAPY

by Miss B. M. R. MORRIS, L.C.S.T., Senior Speech Therapist

At the commencement of this year the Speech Therapy Department had three full-time Therapists.

After the vicissitudes of 1955 we hoped to settle down and increase our staff to its agreed complement of four by September, 1956. However, this was not to be. Miss S. Collins left in May to take up a post in Gloucestershire. Miss M. Morris and Miss M. Smith carried on until September when Miss I. Newman was appointed. Miss Smith resigned at the end of September on her marriage, and we wish her every happiness in her future life. She will be greatly missed, especially in the Special Schools. Our sessions at these have had to be suspended owing to the demands of the ordinary Clinics.

In the midst of these upheavals, however, we were fortunate to secure the services of Mrs. T. G. Meade, who was Speech Therapist here from 1931-39. Mrs. Meade commenced her duties on 8th October, and is doing afternoon sessions only at Splott, Canton and Grange Clinics.

So we end the year with a staff of two full-time and one part-time Speech Therapists, operating at Central, Gabalfa, Ely, Canton, Splott and Grange Public Health Clinics and Rumney C. P. Infants' School.

The attendances during School holidays continue to be very low.

It has been impossible to start a session at Greenhill Open-air School. The Spastic Unit at the Open-air School will be opening in April, 1957, and requiring the services of a Speech Therapist.

The Occupation Centre is also putting in its claim for help. We trust that some of these claims may be met during 1957.

The statistics relating to the work for the year show that the total number of children treated was 353. New cases admitted during the year were 163 and those discharged 156. In addition, 92 children were being kept under observation and the treatment of a further 31 was suspended. Nine of this number were pupils of the Gabalfa Special School or Llanishen Court Special School. One hundred and ninety-nine children were awaiting appointments at the end of the year. The Speech Therapists made 172 visits to Schools and to the homes of children during the year.

The clinical conditions treated and the results at the time of discharge are shown on the accompanying table.

DISCHARGES, 1956

	Speech normal	Much improved	Temporary discharge	Left district	In hospital	Unlikely to benefit	Failed to attend	Total
Stammer ..	5	16	4	1	—	4	17	47
Dyslalia	20	12	3	4	1	6	42	88
Dysphonia ..	—	—	1	—	—	—	—	1
Spastic	—	—	—	—	—	—	—	—
Nasal Sigmatism ..	—	—	1	—	—	—	—	1
Lateral „ ..	1	1	—	2	—	2	1	7
Interdental „ ..	2	3	—	—	—	1	—	6
Cleft Palate ..	—	1	2	—	—	—	1	4
Rhotacism ..	1	—	—	—	—	—	—	1
Partial Deafness ..	—	—	—	—	—	—	1	1
TOTALS ..	29	33	11	7	1	13	62	156

CHILD GUIDANCE CLINIC

Statistics.—The following is a summary of the work of the Child Guidance Clinic :—

(1) Number of patients referred to the Clinic during the year :—

Boys	..	..	..	..	99
Girls	..	..	..	..	51
TOTAL					150

(2) Number of patients carried forward from 1955 :—

Boys	..	..	..	..	61
Girls	..	..	..	..	30
TOTAL					91

(3) Sources of ascertainment of patients actually dealt with for the first time :—

Parents or Guardians	..	..	..	15
Juvenile Court	..	..	..	—
Social Agencies	..	..	..	14
Schools	..	..	..	32
School Health Service	..	..	..	60
Other sources	..	..	..	9
Probation Officers	..	..	..	6
Private Medical Practitioners	..	..	..	30
TOTAL	..	..	..	166

(4) Problems for which patients were referred to the Clinic :

Nervous Disorders

Fears	..	..	..	..	21
Seclusiveness	..	..	..	..	10
Depression	..	..	..	..	8
Excitability	..	..	..	..	1
Apathy	..	..	..	..	2
Obsessions	..	..	..	..	5
TOTAL	..	..	..	..	47

Habit Disorders and Physical Symptoms

Speech Disorders	..	..	..	..	4
Sleep	..	..	..	..	24
Movement	..	..	..	..	8
Feeding	..	..	..	..	12
Excretory	..	..	..	..	20
Nervous pains and paralysis	..	..	..	..	4
Fits, disorders	..	..	..	..	5

Behaviour Disorders

Unmanageable	..	..	..	..	43
Temper	..	..	..	..	9
Aggressiveness	..	..	..	..	8
Jealousy	..	..	..	..	—
Demanding attention	..	..	..	..	2
Stealing	..	..	..	..	27
Lying and romancing	..	..	..	..	7
Truancy	..	..	..	..	26
Sex difficulty	..	..	..	..	5

Education and Vocational difficulties

Backwardness	16
Inability to concentrate	3
Inability to keep jobs	—
Special Disabilities	—

For special examination

Psychological examination	—
Educational advice	1
Vocational guidance	—
Court examination	—
Admissions to Special (not M.D.) residential school, etc.	1
Placement in Foster Homes	—
Adoption	—

Number of patients dealt with 234

(5) Age of patients dealt with for the first time :—

Years	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	TOTAL
Boys ..	2	—	3	3	8	17	7	7	14	12	10	9	9	3	—	—	104
Girls	—	—	2	2	6	8	4	5	6	5	3	7	6	5	2	1	62
TOTAL	2	—	5	5	14	25	11	12	20	17	13	16	15	8	2	1	166

(6) Results of treatment of patients discharged :—

Advisory	34
Adjusted	34
Partially adjusted	36
Unadjusted	—
Transferred to other agencies	7
Withdrawn	5
Failed to co-operate	37
Unsuitable for further treatment	1
Left Cardiff	1
TOTAL	155

(7) Number recommended for admission to Residential Schools or Hostels

1

Number admitted to Residential Schools or Hostels

—

(8) Work of Sections :—

(a) *Psychiatric*

Patients examined	..	..	..	130
Treatment interviews	..	..	..	116
Interviews with parents	..	..	..	106
School visits	..	..	..	—
Other interviews	..	..	..	8
Home visits	..	..	..	—

(b) *Psychological*

New patients dealt with	..	..	..	132
Re-examinations	..	..	..	115
Remedial teaching	..	..	..	—
School visits	..	..	..	54
Interviews with parents	..	..	..	156
Other interviews	..	..	..	17

(c) *Social Service*

Interviews with parents, etc., at Clinic				299
Visits to homes of patients	..	..	..	24
School visits concerning patients	..	..	..	23
Other visits concerning patients	..	..	..	65

(9) Staff conferences regarding patients	..	..	..	653
Staff Conferences	..	..	..	46

(10) Number of patients waiting to be dealt with at end of year :—

Boys	..	..	..	..	7
Girls	..	..	..	..	—
					—
TOTAL	..	..	..	..	7
					—

VIII—NURSERY SCHOOL AND CLASSES

Severn Road Nursery School.—During the year the average number of children on the register of Severn Road Nursery School was 100, the average attendance being 82.

There are eight Nursery Schools and two Nursery Classes in the City, situated as follows :—

Nursery Schools :	1.	CANTON	..	..	Severn Road
	2.	GRANGETOWN	..	..	Ferry Road
	3.	SPLOTT	..	..	Moorland Road
	4.	ELY	..	..	Vachell Road
	5.	SPLOTT (Tremorfa)			Baden Powell School
	6.	ELY	..	..	Hywel Dda School
	7.	SOUTH (Docks)	..	..	West Yard, Bute Street
	8.	RUMNEY	..	..	Rumney School
Nursery Classes :	1.	NINIAN PARK	..	..	Ninian Park School
	2.	ADAMSDOWN	..	..	Tredegarville C/W School

Accommodation is provided at the Nursery Schools for a total of 486 children aged 2—5 years. At the Nursery Classes 60 children aged 2—5 years can be accommodated.

Health Visitors pay a visit to each Nursery School and Class at least once in each week and very often at more frequent intervals as such visits become necessary. A Medical Officer visits the Nursery Schools and Classes at intervals of approximately one month for the purpose of medically inspecting new entrants and of reviewing the health of pupils.

The number of children medically inspected during 1956 as "Entrants" to the Nursery Schools and Nursery Classes was 296 (160 boys and 136 girls) and the defects found (excluding uncleanness, dental caries and defects of nutrition) were as follows :

Disease or Defect	Number of Defects	
	Treatment Required	Requiring to be kept under Observation only
SKIN :		
Ringworm Scalp	—	—
Ringworm Body	—	—
Scabies	—	—
Other Diseases	1	—
EYE :		
Defective Vision	—	—
Squint	2	1
External Eye Disease	—	—
Other Eye Disease	—	—
EAR :		
Defective Hearing	—	—
Otitis Media	—	—
Other Diseases	—	1
NOSE AND THROAT	10	9
DEFECTIVE SPEECH	—	1
ENLARGED CERVICAL GLANDS	1	1
HEART AND CIRCULATION	—	—
LUNGS	2	8
DEVELOPMENTAL :		
Hernia	—	—
Other	—	—
ORTHOPAEDIC :		
Posture	—	1
Flat Foot	3	6
Other	9	12
NERVOUS SYSTEM :		
Epilepsy	—	—
Other Conditions	—	—
PSYCHOLOGICAL		
Development	—	—
Stability	—	—
TEETH :		
Dental Diseases	—	—
OTHER DEFECTS AND DISEASES	3	1
TOTAL	28	41

The number of children referred for medical treatment was 28.

The following is a classification of the physical condition of the children inspected :

	Number	Percentage
Satisfactory ..	247	83.4
Unsatisfactory ..	49	16.6

Nine children were found to be unclean.

Health Visitors visited the Nursery Schools and Classes on 524 occasions during the year and paid 432 visits to the homes of the pupils.

IX—PREVENTION OF TUBERCULOSIS

by A. H. GRIFFITH, Senior Medical Officer

Active antituberculosis work in Schools can be divided into two parts, namely, the early detection and segregation of sources of tuberculous infection and the artificial stimulation of resistance to tuberculosis in pupils who are particularly prone to the disease.

The early detection of sources of tuberculous infection in schools is possible by two methods, both effective, but neither used on an extensive scale in Cardiff. The first method involves regular periodical x-ray examination of the chest of all those who come into frequent and intimate contact with children at school. Teachers have certain obligations towards their pupils and one of these obligations is to ensure that they do not unwittingly disseminate a serious disease among their vulnerable pupils. It is possible that at this moment 2 or 3 teachers in Cardiff are doing exactly that. The teachers cannot be blamed, however, if they are not encouraged or obliged to undergo x-ray examination. At present they are required to subject themselves to such an examination on entry into the profession but a satisfactory report then does not mean that the teacher will remain non-tuberculous. Some local education authorities require all new entrants to the service to agree to undergo annual x-ray examinations. In Cardiff no compulsion is used and a teacher who is suspected of suffering from tuberculosis can resist being x-rayed. In fact, we have some teachers who have suffered from tuberculosis, received treatment, recovered sufficiently to return to their teaching duties and then, after a period of about 3 years, have refused to attend the Chest Clinic for any examination or take any steps to ensure that they have remained in a non-infectious condition.

At the end of 1956 and the beginning of 1957 arrangements were made for all children aged 13 and over to be offered x-ray examinations at a Mass Radiography Unit. This service was also available for the teaching staff. The value of Mass X-rays of the older children is debatable and we must await the results of this survey before deciding whether or not it should be repeated annually, or restrict the examination to those who, on tuberculin testing, are found to have been infected.

Mass X-ray examination has been described as one method of detecting unsuspected sources of infection in schools. The other method is mass tuberculin testing. A Heaf multiple puncture tuberculin test is simple, quick, easy, safe, painless and reliable. It is a skin test that will give definite evidence whether or not the person tested has been previously infected by the tubercule bacilli. Usually only a small percentage of children show evidence of having been infected, approximately 4 per cent of those aged 5 rising to 20 per cent of those aged 13 years. In nearly every case, the infection has occurred outside the school. When a source of infection exists in a classroom the percentage of children giving a positive reaction to the tuberculin test may be well over 50 in that class. Therefore, if a system of serial tuberculin testing were adopted in Cardiff, it would show which children were being infected in the classroom in school and would reveal sources of infection that would be missed otherwise. Secondly, as the tests would be performed annually, it would detect which children had been infected during every 12 months, and the sources of infection outside the school are more likely to be found as a result. At present tuberculin testing in schools is confined to 13 year old children prior to B.C.G. vaccination, and in schools immediately after a member of the staff has been notified as suffering from pulmonary tuberculosis. Two teachers of the staff of two different schools in Cardiff were notified during 1956 as suffering from pulmonary tuberculosis. Tuberculin testing of the pupils did not reveal even a moderately high proportion of positive reactors in any of the classes in the school and this fact suggested that no case of tuberculosis would be found among the pupils. The positive reactors were x-rayed and the results confirmed our opinion that no new cases of tuberculosis would be found in the school.

There is a decrease in the proportion of 13-year old children giving a positive tuberculin reaction in 1956 compared with the proportion of positive reactors in 1955 and 1954. This means that fewer children had been infected during their 13 years of life, or, in other words, the sources of infection in the community at large were fewer or less dangerous.

TABLE I. SHOWING THE PROPORTION OF TUBERCULIN POSITIVE REACTORS AMONG 13-YEAR-OLDS IN CARDIFF DURING 1954, 1955 AND 1956

Year	Number of 13 year old children		Percentage found Tuberculin Positive
	Tuberculin Tested	Tuberculin Positive	
1954 ..	1,173	282	24
1955 ..	1,885	352	24
1956 ..	1,919	360	22

The second part of our anti-tuberculosis work in schools involved the administration of the B.C.G. vaccine. During the year the progress report of the Medical Research Council was published and this revealed that B.C.G. is 83 per cent effective in preventing tuberculosis in school leavers during the two and a half years after vaccination. Those who developed tuberculosis in spite of B.C.G. suffered from only the milder forms. B.C.G. is of proved value against tuberculosis and, therefore, it is pleasing to note that nearly three-quarters of the parents of 13-year-old children in Cardiff signified their willingness to allow their children to be vaccinated.

Those children who had received the B.C.G. vaccine in 1955 were tuberculin tested in 1956 and the result of these tests showed that in 97.9 per cent the degree of allergy to tuberculin (which is associated with immunity to tuberculosis) induced by the B.C.G. was satisfactory.

Tuberculin testing in schools is carried out by two highly specialised B.C.G. Health Visitors. They also visit the homes of all children found tuberculin positive, arrange for their x-rays and for the examination of contacts in the home.

With the closure of the B.C.G. Hostel at Preswylfa, on 31st March, 1956, new arrangements had to be made to meet the needs of medical officers from other authorities requiring instruction in the theory and practice of tuberculin testing and B.C.G. vaccination. Professor F. R. G. Heaf, David Davies, Professor of Tuberculosis, Welsh School of Medicine and Dr. W. Powell Phillips, Medical Officer of Health, instituted three-day courses which were held about every 3 months. These courses have been attended by Medical Officers from many parts of England and Wales and have proved to be very successful.

TABLE II. SHOWING THE NUMBER OF CHILDREN TUBERCULIN TESTED AND GIVEN B.C.G. IN SCHOOLS DURING 1956 AND 1955

	1956 Age of Pupils					TOTAL	1955
	12 & under	13	14	15	16+		
Number of children offered B.C.G.	124	2,529	204	32	21	2,910	4,409
Number of refusals	14	610	25	8	6	663	966
Number of children tuberculin tested	110	1,919	179	24	15	2,247	3,443
Number of positive reactors ..	10	421	41	11	7	490	990
Number given B.C.G.	100	1,498	138	13	8	1,757	2,453

The decrease in the number given B.C.G. in 1956 compared with 1955 was due to the fact that approximately 2,000 pupils over the age of 13 were offered B.C.G. in 1955. The present policy is to give B.C.G. to 13 year-old pupils only.

TABLE III SHOWING THE RESULTS OF POST B.C.G. TUBERCULIN TESTS
CARRIED OUT DURING 1956

Year B.C.G. Given	Number tuberculin tested in 1956	Number definitely tuberculin positive	% tuberculin positive	Number doubtful	Number tuberculin negative	Number re- vaccinated
1954 ..	583	576	98·8	7	0	0
1955 ..	1,475	1,438	97·5	32	5	1

X—MISCELLANY

INFECTIOUS DISEASES

The number of schoolchildren ascertained to be suffering from infectious diseases during the year were as follows :—

Scarlet Fever	..	..	..	200
Whooping Cough	..	..	..	257
Diphtheria	..	..	..	—
Measles	..	..	..	40
Acute Pneumonia	..	..	..	19
Meningococcal Infection	..	..	..	1
Paralytic Poliomyelitis	..	..	..	2
Non-Paralytic Poliomyelitis	..	..	..	6
Acute Encephalitis— Infective	..	..	..	1
Dysentery	..	..	..	26
Para-Typhoid Fever	..	..	..	1
Enteric or Typhoid Fever	..	..	..	—
Tuberculosis—Respiratory	..	..	..	29
Other Forms	..	..	..	7
Chickenpox	..	..	..	840
Erysipelas	..	..	..	3
Food Poisoning	..	..	..	5
Rubella	..	..	..	27
Mumps	..	..	..	18
Jaundice	..	..	..	11

PROVISION OF MEALS

Kitchens are in operation at Tremorfa and Ely and the following Schools :—Gabalfa Special School, Greenhill Open-air School, Greenway Primary School, Ton-yr-ywen School, Heol Trelai School, Windsor Clive School, Cathays High School, Canton High School, Cardiff High School for Girls, Glantaf School, Gabalfa Primary School, Moorland Primary School, Fairwater Primary School, Lady Maragret High School, Howardian Technical School, Cefn Onn School, Peter Lea School, Brynhafod School, Penybryn School, Heol Hir School, Lady Mary R.C. High School and at eight Nursery Schools.

Canteens.—Facilities are available at 108 School Canteens for providing mid-day meals for 11,000 children daily.

The number of children attending primary, high, special and nursery schools provided with dinners and/or milk during the first and last complete weeks of 1956 were as follows :—

	<i>First complete week, 1956</i>	<i>Last complete week, 1956</i>
Average number of necessitous children provide with dinner daily free	2,187	1,643
Average number of children provided with milk daily free	33,779	33,739
Average number of children provided with dinner daily on payment	7,623	8,568

MEDICAL EXAMINATIONS OF TEACHERS AND ENTRANTS TO COURSES OF TRAINING FOR TEACHING AND TO THE TEACHING PROFESSION

The School Medical Officer is an examining medical officer for the Education Committee in respect of the entry of teachers into the superannuation scheme. During the year 67 teachers were examined for this purpose.

From 1st April, 1952, the Minister of Education instituted new arrangements for medical examinations for entrants to the teaching profession and for candidates applying for entry to training colleges, university departments of education and approved art schools. (Circular 249, 28th March, 1952.)

The School Medical Officer has the duty of examining candidates applying for admission to training colleges and entrants to the teaching profession except those intending to enter the teaching profession on completion of an approved course of training, in which case they are examined as at present by the College Medical Officer. The School Medical Officer has to fulfil this last obligation in respect of students completing courses at the Cardiff College of Art as he acts as the College Medical Officer.

As a result of these requirements, 151 candidates and entrants were medically examined.

The Minister also directed that x-ray examinations shall be an essential part of the medical examination on entry to the teaching profession as from 1st April, 1953. (Circular 248, 28th March, 1952.)

ACCIDENTS TO PUPILS

Head Teachers are requested to provide details of all accidents occurring to pupils on school premises or arising out of school activities.

During 1956, 185 such reports were made relating to 110 boys and 65 girls and, in addition, to 5 male students and 5 female students of the Technical College and the College of Art.

APPENDIX A

DESCRIPTION OF REGULAR CLINICS

	Minor Ailments	Cleansing Station	Ophthalmic	Orthoptic	E.N.T.	Juvenile Rheumatism	School Dental Service	Speech Therapy	Enuresis Clinic
(a) School Clinics also used for General Health Purposes :—									
Central Clinic, 30 Richmond Road ..	Yes	—	Yes	Yes	Yes	—	Yes	Yes	Yes
Gabalfa Clinic, 213 North Road ..	Yes	—	Yes	—	Yes	—	Yes	Yes	—
College Farm Clinic, Llanidloes Road	Yes	—	Yes	—	Yes	—	Yes	—	—
Splott Clinic, 139 Splott Road ..	Yes	—	Yes	—	Yes	—	Yes	Yes	—
Grange town Clinic, Cambridge Street	Yes	—	Yes	—	Yes	Yes	Yes	Yes	—
Canton Clinic, Wessex Street ..	Yes	—	Yes	Yes	Yes	—	Yes	Yes	—
Ely Clinic, Redhouse Crescent ..	Yes	Yes	Yes	—	Yes	Yes	Yes	Yes	Yes
(b) Temporary School Clinics :—									
Medical Inspection Room, Greenway	—	—	—	—	—	—	Yes	—	—
County Junior School ..	—	—	—	—	—	—	—	—	—
Runney Infants School, Wentloog Road ..	Yes	—	—	—	—	—	—	—	—
(c) Public Health Clinic available for school-children :—									
Cleansing Station, St. David's Hospital	—	Yes	—	—	—	—	—	—	—

N.B.—Speech Therapy Sessions normally held at Llanishen Court and Gabalfa Special Schools are temporarily suspended. School Nurses also treat minor ailments at Llanrunney C.P. School and Cefn Onn C.P. School.

January, 1957

APPENDIX B**Temporary Clinics**

Temporary arrangements are still necessary to cover the urgent needs of the Rumney and Llanrumney areas of the City.

These areas are situated in the Roath Ward and were transferred from Monmouthshire in 1939, and have been the scene of extensive building, both of private and council houses.

Approval has been given by the Government for a Health Clinic to be built by the Local Authority, but, in the meantime, a full-time School Dental Officer, holding a temporary appointment, is accommodated in the Medical Inspection Room at Greenway County Junior School.

A small waiting room has been converted for use as a Dental Recovery Room, and when necessary, a further room is made available by the Head Teacher for waiting accommodation.

Temporary arrangements have been made for the holding of Minor Ailments Clinics, Clinics for the treatment of Enuresis, and sessions for Speech Therapy, at the Rumney Infants' School at Wentloog Road, where one room has been specially equipped for this purpose.

The treatment of minor ailments has also been arranged at the Brynhafod and Penybryn Schools.

